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ABSTRACT

A collection of conference papers includes: "More on Arabic Vowel Harmony: A Metrical-Suprasegmental Approach" (Issam Abu-Salim); "The Phonological Assimilation of Borrowing" (Saleh Suleiman); "On Getting a Head: A Problem in Dependency Grammar" (Jonathan Owens); "Negation in Jordanian Arabic: A Developmental Study" (Oglah Smadi); "Problems in Teaching Arabic to Foreigners" (text in Arabic) (Fayiz Al-Hamad); and "Sex Differentiation and Linguistic Variations. A Case Study: Spoken Arabic in Amman" (Hassan Abdel-Jawad). (MSE)

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Proceedings of the Second Annual Linguistics Conference

April 1983

Compiled by

Jonathan Owens   Issam Abu-Salim

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Department of English
Yarmouk University
Irbid, Jordan

Dedicated to the Memory
of our Colleague
MOHAMMAD AMIN QADIR

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Correction

Page 3. The title of Saleh Suleiman's paper should read,
"The Phonological Assimilation of Borrowing"

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The present collection of papers was presented at the second annual linguistics conference held at Yarmouk University on 28 April, 1983 under the sponsorship of the English Department. Among the participants in the conference we would like to thank in particular Dr. Shahir El-Hasan of Yarmouk University and Dr. Mohammad Hasan Ibrahim of Jordan University for chairing the morning and afternoon sessions, as well as Dr. Riyad Hussein (Yarmouk) and Dr. Mohammd Ajlouni (Yarmouk) for acting as discussants. Thanks also go to Dr. Yousef Halis and Dr. Edward Mina of Jordan University for an oral presentation on emphasis in Arabic. The support provided by Yarmouk University has been greatly appreciated.

Jonathan Owens Isam Abu-Salim

Forward

In 1982 the Department of English held its first Linguistics Seminar. The Participants were from the English Department and Arabic Department. Several papers were presented and discussed. The first seminar was deemed successful by the Department, hence it was decided to hold the second Linguistics Seminar in April, 1983. From Yarmouk University the participants were members of the staff from the English, Arabic, and Education Departments, from the Language Center and from the Jordanian Studies Center. Participants from Jordan University came from the English Department, Language Center, and the Medical School.

The seminar provided the participants with a platform for presenting drafts of their research papers. The discussions and comments were extremely valuable for the researchers, helping them to see their work in better perspective, and for the participants, who were given the opportunity to share the experience of the researchers.

It is hoped that the English Department will be able to repeat this event and make it one of its regular functions.

I am delighted to write this introduction to the proceedings of second seminar.

Dr. Shahir El-Hassan
Department of English Language and Literature

List of Symbols

g = ɣ

sh = ʃ

j = dʒ

c = tʃ

C̣ = pharyngealized consonant

c = ʕ

In Abu-Salim's paper

Φ = foot

s = strong syllable

w = weak syllable

In Smadi's paper

v̄ = long vowel

MORE ON ARABIC VOWEL HARMONY: A METRICAL-SUPRASEGMENTAL APPROACH

Issam M. Abu-Salim

In this paper, vowel harmony (henceforth, VH) refers to the process whereby high unround vowels acquire the feature [+ round] in the context of high round vowels, as illustrated by the examples in (1-2) with verbal roots:[1]

(1)a.	*yí-fham*	'he understands'
b.	*tí-^{c}mal*	'you (m.sg.)/she work(s)
c.	*yí-lbis*	'he wears'
d.	*tí-nzil*	'you (m.sg.)/she descend(s)
(2)a.	*yú-drus*	'he studies'
b.	*yú-ḥrus*	'he guards'
c.	*tú-ktub*	'you (m.sg.)/she write(s)
d.	*tú-ṭlub*	'you (m.sg.)/she ask(s)

In (1), where the root (stem minus affixes) contains either a [-high] vowel (1a,b) or a [-round] vowel (1c,d), the prefixal vowel remains unround, whereas in (2) the prefixal vowel is realized as /u/ since the root contains a $\begin{bmatrix}+\text{high}\\+\text{round}\end{bmatrix}$ vowel.

This phenomenon is also observed in words with nominal stems, but in this case the harmonizing vowel precedes the harmonized one, as shown in (3-4) where the rightmost vowel in (3) appears as /i/ because it is preceded by an unround vowel in the stem, and as /u/ in (4) since the preceding vowel is $\begin{bmatrix}+\text{high}\\+\text{round}\end{bmatrix}$:[2]

(3)a.	*ʔákil*	'food'	(4)a.	*shúǥul*	'work'
b.	*fíhim*	'understanding'	b.	*fúrun*	'oven'
c.	*báǥil*	'mule'	c.	*ᶜúrus*	'wedding'
d.	*jísir*	'bridge'	d.	*kúfur*	'atheism'

Both cases of VH, the regressive harmony in (2) and the progressive harmony in (4), apply to verbal forms amplified by vowel-initial subject suffixes:

(5)a.	*yú-durs-u*	(</*yi-drus-u*/)	'they study'
b.	*tú-kutb-i*	(</*ti-ktub-i*)	'you (f.sg.) write'
c.	*tú-ḥurs-u*	(</*ti-ḥrus-u*)	'you (pl.) guard'

These forms, along with their assumed underlying representations, show an alternation between a CVCC root shape in the surface forms and a CCVC root shape in their corresponding underlying forms (cf. also the examples in (2) with CCVC roots.) One of the possible analyses of this alternation is found in Kenstowicz (1981) where the two rules of VH mentioned above are utilized in the derivation of the CVCC alternant in the following way: First, the leftmost vowel undergoes the regressive harmony rule by which it becomes /u/ after it has been assigned primary stress. Next a syncope[3] rule that is operative in the language will have a chance to delete the penultimate vowel. This will produce an intermediate structure with a three-consonant cluster which will trigger epenthesis to apply to that structure, thus inserting an /i/ before the last two consonants of the cluster. The inserted vowel will then undergo the progressive harmony rule to become /u/. This analysis is illustrated by the following derivation of (5a):[4]

(6)	/*yi-drus-u*/	
	yí-drus-u	stress assignment
	yú-drus-u	regressive harmony
	yú-drs-u	syncope
	yú-dirs-u	epenthesis
	yú-durs-u	progressive harmony

Although this analysis accounts for the bidirectionality of VH as observed in (6), Kenstowicz opts for adopting a suprasegmental analysis of this phenomenon in Arabic phonology. One of the motivations for the suprasegmental treatment of VH is, according to Kenstowicz, its ability to express VH as a unitary process. The segmental analysis fails to achieve this end in spite of the phonetic similarity and the parallel conditioning environments of both the regressive and progressive harmony rules: the former rule has to apply before syncope and epenthesis, while the latter has to follow these two rules. Thus, it is not possible, given the familiar principles for collapsing rules, to express the two rules in a single schema.

The rest of this paper is organized in the following way: First, Kenstowicz' suprasegmental analysis of VH in Arabic is briefly reviewed and shown to be partially inadequate in view of his definition of the 'stem'. Second, a slightly revised analysis of the stem whereby *all* prefixes come to participate in forming it is given. And, finally, an alternative account of VH based primarily on the metrical structure of the utterance is introduced.

Kenstowicz' suprasegmental analysis views VH as a process by which the suprasegmental feature [+round] is mapped onto all the high vowels in the stem. The prefixal and epenthetic vowels are specified as [-round] and represented as /i/ whereas the root's vowel, when it is high, is not specified for roundness and is represented as /I/ which is neutral with respect to the feature [+round]. The phonetic realization of /I/ as either /i/ or /u/ depends on whether the stem is specified as [+round] or [-round]. Consequently, words such as *túkutbi* 'you (f.sg.) write' would have the underlying representation in (7), where *r* stands for the feature [round], and the derivation in (8):

(7) [ti-ktIb]i
+r

(8)

[tí-ktIb]i +r	stress assignment
[tí-ktb]i +r	syncope
[tí-kitb]i +r	epenthesis
[ti-kitb]i +r	mapping (=VH)
tú-kutb-i	surface form

In this derivation, mapping is ordered after epenthesis to account for the rounding of the epenthetic vowel /i/ when inserted inside the stem. We will see later that vowels inserted outside the stem do not undergo harmony in the same way and are disallowed from doing so by the same mechanism that disallows underlying vowels outside the stem from undergoing VH.

Kenstowicz concludes that a grammar with this suprasegmental analysis of VH in Arabic is descriptively more adequate than a grammar involving two uncollapsible rules of VH or a rule of metathesis whose main function is to rewrite the two rules of syncope and epenthesis by taking a CCVC root directly into a CVCC one when followed by a vowel-initial suffix (cf, Kenstowicz 1981:459 for more information on this rule). But in spite of its advantage over the other two analyses, Kenstowicz' suprasegmental analysis is still inadequate in some other respects. One of the inadequacies of his analysis pertains to the definition of the stem. In Kenstowicz (1981:458) the stem is analyzed into the person-number prefix and the root. Other prefixes, such as the present-tense prefix bi-, and all suffixes are analyzed outside the stem boundaries. The motivation for treating suffixes in this way with respect to VH is obvious: suffixal vowels do not undergo VH and, moreover, they do not trigger preceding vowels to undergo the rule, as illustrated by the following examples with subject and object suffixes:

(9)a.	yú-kutb-u	'they write'
b.	yí-nizl-u	'they descend'
c.	tú-ḍurb-i	'you (f.sg.) hit'
d.	tí-ḥiml-i	'you (f.sg.) carry'
(10)a.	yu-drúb-ni	'he beats me'
b.	yú-ẋutb-ik	'he proposes to you (f.sg.)'
c.	yi-hibs-úuk	'they arrest you (m.sg.)'
d.	yi-misk-úu-ni	'they catch me'

These examples show clearly that suffixal front vowels remain unround although preceded by round vowels in the stem (9c,d) and (10a,b) and do not result in any changes in the preceding or following context despite the fact that they are round (9a,b) and (10c,d). Thus, it is not unreasonable to analyze suffixes as outside the stem since, unlike prefixes, they do not show that sort of "affinity-to-the-root" principle regarding the VH rule.

However, the motivation for preventing the present-tense prefix bi- from participating in forming the stem while allowing for other prefixes to do so is rather weak and unjustified. Kenstowicz' main argument for his analysis of the present-tense prefix is that its vowel does not undergo VH in examples such as bitshúuf (</bi-ti-shuuf/) 'see (3sg.f. present)'. In fact, his motivation for treating that prefix as such is just to explain the failure of the leftmost vowel /i/ in the aforementioned example to undergo VH. This analysis is quite untenable and incompatible with the availability of further data which show that the prefix bi- escapes harmony in such cases not because it is analyzed outside the stem but for another reason having to do with the foot-affiliation of the root's

vowel or controlling segment, and the vowels to be harmonized. In fact, there are cases where the prefix *bi-* appears to undergo VH in the same way other prefixes do, as shown in (11):

(11)a.	*bú-ktub*	'he writes'
b.	*bú-durs-u*	'they study'

A deeper analysis of thses items, however, reveals that the prefixal vowel in such cases is not that of the prefix *bi-* but that of the subjunctive prefix *yi-*, as will be illustrated below. Even so, the prefix *bi-* is not to be treated as being different from the other prefixes and it, therefore, will be analyzed as part of the stem.

Before the alternative analysis of VH is presented, it would be worthwhile to discuss briefly the morphological and phonological properties of the present-tense prefixes in the dialect under investigation. One of the motivations for this discussion is to show the exceptional behavior of such prefixes not only towards VH, but also towards other phonological rules as well, particularly syncope. Consider, for instance, words like *bishúuf* 'see (3sg.m. indicative)'. Not only does the leftmost vowel escape VH, but it also escapes syncope although it is in an unstressed open syllable, a position that usually invokes the syncope rule to apply. This exceptional behavior of the prefix *bi-* invites various possible analyses to derive words having such prefixes from underlying structures having other elements that are deleted throughout the derivation. Before coming to any conclusion regarding those missing elements, let us look at the following paradigm which will shed some light on the underlying structures of the present-tense prefixes:

(12)	Subjunctive		Indicative	
a. 2 sg	*tú-drus*	*t-rúuḥ*	*b-tú-drus*	*bi-t-rúuḥ*
b. 2 sg f	*tú-dùrs-i*	*t-rúuḥ-i*	*b-tú-durs-i*	*bi-t-rúuḥ-i*
c. 2 pl	*tú-durs-u*	*t-rúuḥ-u*	*b-tú-durs-u*	*bi-t-rúuḥ-u*

(12)		Subjunctive		Indicative	
d.	1 sg.	*?á-drus*	*?a-rúuḥ*	*bá-drus*	*ba-rúuḥ*
e.	3 sg m	*yú-drus*	*y-rúuḥ*	*bú-drus*	*bi-rúuḥ*
f.	3 pl	*yú-durs-u*	*y-rúuḥ-u*	*bú-durs-u*	*bi-rúuḥ-u*
		'study'	'go'	'study'	'go'

The examples in (12a-c) show that the subjunctive forms have a CV subject prefix in the case of tri-radical roots and a C prefix in the case of bi-radical roots. This CV-C alternation can be easily accounted for by means of the syncope rule mentioned above.[5] The subjunctive forms in the second column will then be derived from underlying representations having CV prefixes, as illustrated by the following derivation of *t-rúuḥ*.[6]

(13) /*ti-ruuḥ*/
ti-rúuḥ stress assignment
t-rúuḥ syncope

The examples in (12a-c) also show that the indicative forms have the following structure: present tense (indicative) prefix, subjunctive prefix, and the root which is followed in some cases by a subject suffix. The CV-C alternation exhibited by the surface realization of the present tense prefix is also accounted for by syncope. Consequently, words such as *btúdrus* and *bitrúuḥ* will have the underlying structures /bi-ti-drus/ and /bi-ti-ruuḥ/, respectively. The initial stages in the derivation of these two words are as follows:

(14a) /*bi-ti-drus*/ b) /*bi-ti-ruuḥ*/
bi-tí-drus *bi-ti-rúuḥ* stress assignment
b-tí-drus *bi-trúuḥ* syncope

The correct phonetic forms are then derived after VH is applied to (14a).

The examples in (12d-f), on the other hand, uncover a second type of alternation. The subjunctive forms in this group have prefixes starting with the glottal stop /?/ in (12d) and the glide /y/ in (12e, f), which unexpectedly disappear from the indicative forms. Their absence along with the effect of syncope yields indicative forms with no overt subjunctive prefixes. Thus, the grammar of the dialect under investigation would involve a rule, the exact formulation of which is irrelevant to the present study, to delete the glottal stop and the glide /y/ in those forms. The derivation of birúuḥ would, consequently, proceed as follows:

(15) /bi-yi-ruuḥ/
bi-yi-rúuḥ stress assignment
bi-y-rúuḥ syncope
bi-rúuḥ glide-deletion[8]

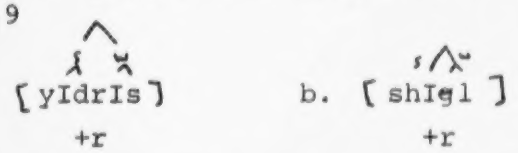
Thus, it seems, given this analysis of the subjunctive and indicative forms, all the subject and present-tense prefixes are of the CV type, the C alternant being basically derived by syncope and other rules such as glide-deletion. This conclusion is relevant to the subsequent discussion and will explain, among other things, the immunity of the high vowel /i/ in words like bishúuf against both syncope and VH.

The alternative analysis of VH proposed in this paper is partly based on the suprasegmental analysis of VH in Palestinian Arabic given in Kenstowicz (1981) and partly on the metrical approach to phonological rules elaborated in McCarthy (1979), Selkirk (1980), and Hayes (1980), among others, and on the revised definition of the stem given above. Two categories will be of some significance to the present discussion. The first category is the foot. It will be argued that the foot is the domain of the VH rule in the sense that a vowel /i/ will become /u/ in the vicinity of another vowel /u/ if the two vowels share the same foot. And the second category is the stem since only vowels within the stem undergo VH. Moreover, it will be argued that it is the foot, not the stem, that is going to be specified for the feature round . Accordingly, some feet will be specified as [+round] and others as [-round]. This means that if a foot is specified as [+round], all high vowels within the domain of that foot will be phonetically realized as /u/. Of course, the mapping of the feature

[+round]onto high vowels will take place at a later stage in the derivation so as to account for applying VH to epenthetic vowels within feet.

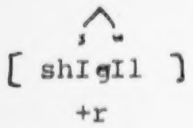
To see how this analysis will work, consider first of all simple cases like yúdrus (</yi-drus/) 'to study (3 sg.m. subjunctive)' and shugul (</shugl/) 'work'. These two items will have the following underlying structures, where Φ stands for the category 'foot':[9]

(16)



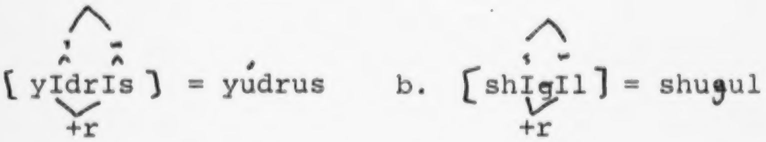
Epenthesis will apply to the structure in (16b) to break the final consonant cluster by inserting the vowel /i/ between the last two consonants, thus yielding the structure in (17):[10]

(17)



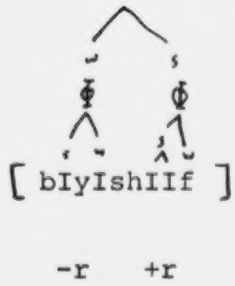
Finally, the feature [+r] is mapped onto all the high vowels in the foot, which is coextensive with the stem in this case, to yield the structures in (18):

(18)

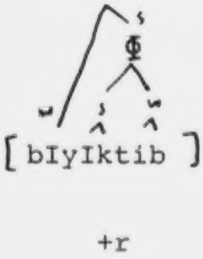


That the category 'foot' is significant in the discussion of VH in Arabic can be illustrated by examples such as bishúuf (</bi-yi-shuuf/) 'see (3 sg.m. indicative)' where the prefix bi- does not undergo harmony. This is to be contrasted with examples such as búktub (</bi-yi-ktub/) 'write (3 sg.m. indicative)' where the prefix bi- seems to undergo harmony. The initial representations for these two items are the following:

(19)a.

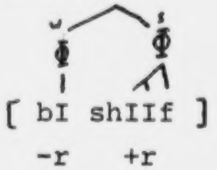


b.

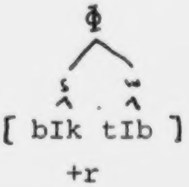


In (19a) there are two feet, the second of which is specified as [+r], whereas in (19b) there is only one foot and it is specified as [+r], too. Syncope and glide-deletion would apply to the structures in (19a,b) to yield the representations in (20a,b):[11]

(20)a.



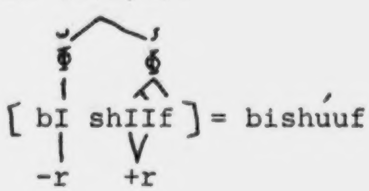
b.



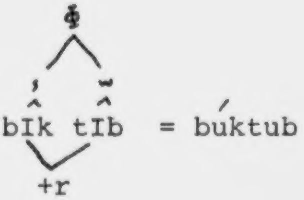
It is to be noted in this regard that it is the second vowel in (19a) that is syncopated and, after glide-deletion, the initial syllable bi- is left dominated by a foot node. Thus, the /i/ in that syllable escapes syncope although the foot dominating it is weak (cf. Selkirk (1980)). In (18b), on the other hand, it is the /I/ of the initial syllable that is syncopated since it is in a weak metrical position that is not a foot.

The structures in (20a,b) will now be subjected to VH, or, in other words, mapping the feature [round] to the high vowels in the segmental string. This mapping results in the structures in (21a,b):

(21)a.



b.



The vowel dominated by the first foot in (21a) is realized as /i/ whereas the two vowels in the second foot are realized as /u/ since the first foot is marked [-r] and the second [+r], although both feet are located in the same stem. In (21b), on the other hand, both the prefixal vowel and the root vowel are realized as /u/ because they are dominated by the same foot that is marked [+r]; in this case the foot is coextensive with the stem.

This analysis explains why the prefixal vowel in examples like *bi-shúuf* does not undergo VH. If the 'foot' analysis were not present, one would endorse analyses like Kenstowicz' whereby the present-tense prefix is analyzed outside the stem. The present analysis, moreover, accounts for the opaque structure in examples like *bishúuf* where the first high vowel escapes syncope although it occurs in an unstressed open syllable. We have seen that the initial syllable in *bishúuf* is left exclusively dominated by a foot node after syncope and glide-deletion have applied. Being a foot, although weak, implies some degree of prominence, as pointed out in Selkirk (1980:565). Thus, it seems that the category 'foot' protects the first vowel in *bishúuf* against syncope. This syncope rule must then be restricted to affect only weak nodes that are not feet.

Thus far, the stem has not been shown to be relevant to the present analysis of VH in Arabic. All that has been argued for is that the foot is the domain of VH. This conclusion should be complemented by another statement emphasizing the significant role of the stem in limiting the segments that may undergo harmony, given that suffixal vowels do not undergo harmony, as can be seen in the following examples:

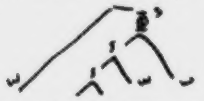
(22)a. b-tú-kutb-i / *b-tu-kutb-u
(</bi-ti-ktub-i/) 'you (f.sg.) write'

b. b-tú-kutb-u (</bi-ti-ktub-u/) 'you (pl) write'

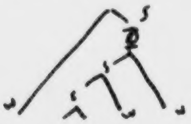
(23) bú-?umr-ik/ *bu-?umr-uk 'he orders you (f.sg.)'

The suffix /i/ in (22a) remains unround although it is preceded by the vowel /u/ in the stem. Applying the harmony rule to that vowel would result in the incorrect form which is homophonous with (22b) which has a different subject. The same thing is observed in (23) where the wrong form is derived if the rule applies to the object suffix -ik.

It is to be noted, however, that the suffixes -i and -ik in (22a) and (23), respectively, share the same foot with parts of the preceding stem, as can be seen in the following initial representations for (22a) and (23):[12]

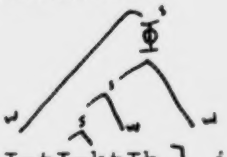


(24)a. bI-tI-ktIb-I
+r

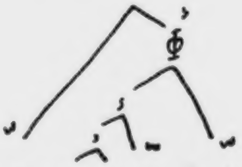


b. bI-yI-ʔmIr-ik
+r

In spite of this, the suffixes -i and -ik escape harmony. It seems then that the stem boundary is relevant in deciding which vowels do undergo harmony. Consequently, the structures in (24a,b) can be re-represented as in (25a,b), where the brackets indicate stem boundaries:



(25)a. [bI-tI-ktIb] i
+r



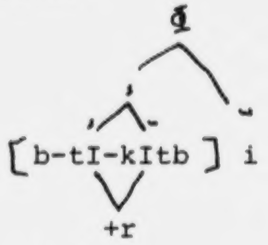
b.[bI-yI-ʔmIr] ik
+r

The VH rule must then be formulated in a way that makes reference to both the stem and foot categories. A possible formulation of the rule is given in (26):

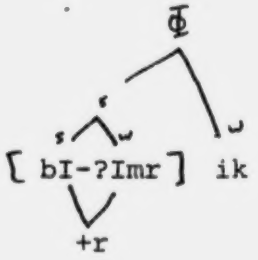
(26) I → u/[X Φ ...___...] Y ...Φ where X and Y may be Ø
+r

This rule says that a high vowel will acquire the feature [+round] if it is located inside a stem and is dominated by a foot specified as [+r]. The structures in (25a,b) would consequently be transformed into those in (27a,b) as a result of applying rule (26) after syncope, epenthesis, and glide-deletion have applied.

(27)a.



b.



= btúkutbi

= bú?umrik

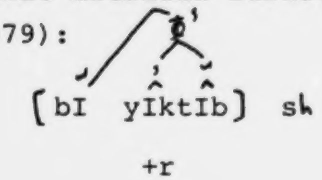
Epenthetic vowels which are inserted outside the stem do not undergo harmony, either. We have seen earlier (the derivation in (8)) that when the epenthetic vowel /i/ is inserted inside the stem it generally undergoes harmony when it meets the conditional environment of the rule. But when it is inserted outside the stem, it fails to undergo harmony even if it comes to share a foot with a preceding round vowel, as illustrated by the following examples, where the underlined /i/ is epenthetic:

(28)a. buktúbish / *buktúbush
(</bi-yi-ktub-sh/) 'he does not write'

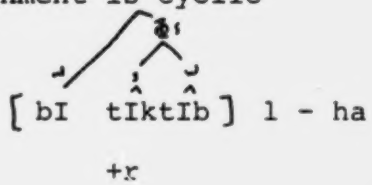
b. btuktúbilha /*btuktúbulha
(</bi-ti-ktub-l-ha/) 'she writes to her'

The initial representations for these examples are the following, given that metrical structure assignment is cyclic (Kiparsky, 1979):

(29)a.

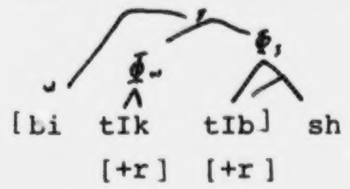


b.

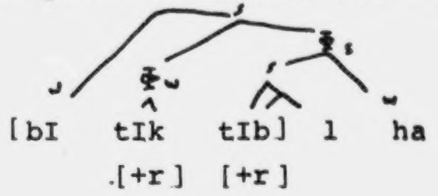


Subsequent assignmentof metrical structure on the superordinate cycles, on the one hand, and foot-restructuring as in McCarthy (1980), on the other, would yield the structures in (30a,b):

(30a)

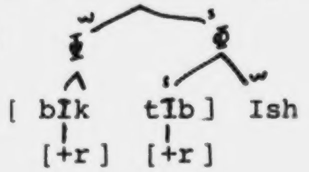


(b)

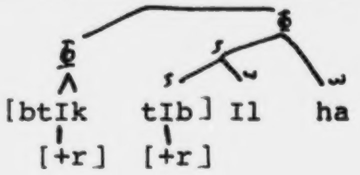


Finally, rule (26) would now apply to associate the feature [+r] with all the stem high vowels that are dominated by the same foot:

(32a)



(b)



This mapping would consequently yield the correct phonetic forms buktúbish and btuktúbilha where the epenthetic vowels are realized as /i/, although they are dominated by feet specified as [+round].

In summary, we have seen that a purely segmental or supra-segemntal analysis of VH in Arabic is inadequate since it leaves some of the questions unanswered. The metrical approach presented in this article, whereby the category 'foot' is recognized as an independent structural unit that phonological rules may refer to, seems to be superior, especially when it is amplified by some features of the suprasegmental approach to phonological rules as outlined in Clements (1976) and Goldsmith (1976, 1979).

NOTES

[1] All examples cited in this paper are drawn from a dialect spoken in various parts of Palestine and Jordan. The present analysis is, however, valid for describing other dialects of Arabic as well.

[2] These examples are generally analyzed as having underlying stem of the form CVCC, the surface alternant CVCVC being derived by an epenthesis rule which inserts the vowel /i/ in certain contexts to break consonant clusters. (For more information about this rule, see Brame (1973)).

[3] Syncope has the effect of deleting short high vowels in unstressed open syllables (cf. Brame (1973)).

[4] Cf. Kenstowicz (1981).

[5] No attempt has been made to derive the CV alternant from underlying C by epenthesis given that epenthetic vowels do not receive stress (cf. Abu-Salim (1982a) for cases where epenthetic vowels are assigned primary stress.)

[6] The underlying prefixal vowel is taken to be /i/, the /u/ alternant being derived by VH.

[7] It is possible to derive this form after applying syncope simultaneously to the first two vowels, since they both meet the conditional environment of the rule, and then inserting the vowel /i/ by epenthesis to break the resulting three-consonant cluster. We will see later, however, that it is only the second vowel that is syncopated.

[8] This derivation does not account for the immunity of the first vowel against syncope. A possible analysis of this apaque structure is given later in this article.

[9] See Abu-Salim (1982b) for more information on the structure of the foot in Palestinian Arabic.

[10] In the present analysis, all stem high vowels as well as the epenthetic vowel /i/ will be represented as /I/. Their phonetic realization as /i/ or /u/ is later determined by the feature specification of the foot dominating them.

[11] Syncope only affects high vowels that are labelled w in metrical structures.

[12] Since suffixal vowels do not undergo VH, the unspecified vowel /I/ will not be used to represent them, otherwise, the underlying contrast between the various suffixes will be lost (cf. (22a) and (22b)).

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The Phonological Assimilation of Borrowing

Saleh Suleiman

0 Introduction:

The aim of this paper is to consider in general terms the ways in which different languages may be affected by mutual contact and in particular to look at the way the Arabic language is affected by contact with English. Language contact and bilingualism are generally viewed in terms of the differences and dissimilarities between the languages in contact and are normally stated in the domains of phonology, morpho-syntax, and lexicon. For this to be achieved, a type of differential description is established in order to determine the degree of structural homogeneity of the languages in contact and the precedents for borrowing in each.

The thrust of this paper is to put forward a description of linguistic borrowing from English into Arabic on lexical level. In more specific terms, it studies the phonology of loanwords, and the extent to which Jordanian Arabic has affected the phonemic structure of English loans which have been assimilated either completely or partially into the system of Jordanian Arabic.

1 The Phonological System of Jordanian Arabic:

The phonemic inventory of consonant phonemes in Jordanian Arabic may be represented by the following table:

TABLE 1

JORDANIAN ARABIC CONSONANT PHONEMES

		Bilabial	Labiodental	Plain Interdental	Emphatic Interdental	Plain Dental	Emphatic Dental	Alveolar	Alveopalatal	Palatal	Velar	Uvular	Pharyngeal	Glottal
Stops	VI					t	ṭ				k	(q)		?
	Vd	b				d	ḍ				(g)			
Fricatives	VI		f	θ		s	ṣ		sh			x	ḥ	h
	Vd			đ	(đ̣)	z	ẓ		(ʒ)			ǥ	c	
Affricates	VI								c (=tʃ)					
	Vd								j (=d$_3$)					
Nasals		m						n						
Lateral								l						
Trills								r						
Semi-vowels		w								y				

( ) = Phonemes between brackets are not represented in each regional variety of Jordanian Arabic. Some of them are dialect specific, and no one speaker utilizes them all.[1]

TABLE 2

AMERICAN ENGLISH CONSONANT PHONEMES

	Bilabial	Labiodental	Interdental	Alveolar	Alveopalatal	Palatal	Velar	Glottal
Vl	p			t			k	
Stops				t				
Vd	b			d			g	
Vl					c (=tʃ)			
Affricates								
Vd					j (= dʒ)			
Vl	f		θ	s	sh (ʃ)			h
Fricatives								
Vd	v		ð	z	ʒ			
Nasals	m			n			ŋ	
Laterals				l				
Semi-vowels	w				r	y		

This chart is adopted, with modification, from Gleason 1966 (revised edition), and Ladefoged (1975).

As Table 1 indicates, 32 consonant phonemes are identified in the colloquial Arabic of Jordan. The most noticeable feature is the use of "emphatic"[2] sounds such as /ṭ ḍ ṣ ẓ/, which may also be called "velarized" or "pharyngealized". As Obrecht (1968:19) put it, the Arab grammarians describe the consonants involved in such terms as 'dark, fat, thick, corpulent', applying the Arabic word mufaXXama 'heavy'. According to Jakobson (1957:106), "The characteristic articulatory features of all the emphatic phonemes is the contraction of the upper pharynx." These emphatics are generally articulated further to the back of the mouth than the nonemphatics, and they are accompanied by stronger aspiration. The existence of such features explains the tendency of Arabic bilinguals to project into English some features of pharyngealization and gemination.[3] In other words, Arabic speakers use the framework of the phonemic system of Arabic for the new language (i.e. American English).

The contrast between the American English and the Arabic sound systems demonstrates that American English makes greater use of lips and the front part of the mouth, whereas Arabic stresses the use of post-velar sounds as well as the pharyngealization which is a distinctive feature of Arabic. The phonemes /ḥ/ and /ᶜ/ are pharyngeal fricatives, voiceless and voiced respectively. Needless to say, such phonemes are lacking in the phonemic inventory of American English consonants.

1.1 Contrastive Phonology

The main focus of this section is to come up with a diagnosis of the conspicuous distinctive sound features in the systems of the two languages which may affect the speech of non-native speakers when using loanwords. To illustrate this idea let us consider the phonemes /p/ and /v/. A close investigation of the sound system of both English and the Arabic of Jordan reveals that the two phonemes do not exist in Jordanian Arabic. If the analysis is to be taken in two directions, that is, if American English is contrastively analyzed with Arabic for Arabic speakers, and Arabic is contrastively analyzed with American English for English speakers, then what holds true for English holds true for Arabic: there are phonemes in English which do not exist in Arabic, and there are phonemes in Arabic which do not exist in English. For example, while the phonemic system of English includes /p/ and /v/, Arabic lacks these two phonemes as well as others. The consonants represented in Table 1 exclude phonemes introduced by borrowing. For some Arabic linguists, the consonant phonemes /p/, /v/ have been addedto the Arabic phoneme inventory: as Butros (1963:47) puts it, /p/ and /v/ in Jerusalem Arabic are loan phonemes. In fact very few English consonants have a one-to-one correspondence with Arabic consonants. For example, the English phonemes /t, d, s, z/ may be interpreted as /ṭ, ḍ, ṣ, ẓ/ as well as /t, d, s, z/ . In other words, they might be interpreted as either simple or emphatic. The emphatic phonemes tend to produce a lowering of the vowels in their immediate vicinity. For instance, while unemphatic /d/ and /s/ are followed by the high vowel /i/ in /dim/ 'dim' and /sinama/ 'cinema' respectively, emphatic phonemes often produce low back vowels, e.g., /ṭaṇṇ/ 'ton' /ḅaṣ/bus 'ḅaṭṭariyyi'/ 'battery', etc.

Harrell (1957:75-76) argues that phonetically, emphasis can be described generally as a pharyngeal constriction or velarization cooccurring with the consonantal articulation (except possibly in items such as /^{c}/) and resulting in characteristic vowel alternations, which may be briefly stated as backed and/or lowered. Acoustically, emphasis is detectable as a lowering of the second formant in the speech segment (Jakobson et al 1952:50). Obretch (1968:22-23) states that emphasis may be analyzed as a vowel feature which affects consonants, or as traditionally, a consonant feature which affects vowels. However, both physical and distributional evidence point to the conclusion that analyzing emphasis as a consonantal feature would be preferable. In order to show this, one can make the statement that in a text if there is a sequence neither initial nor final--the central segment is always a consonant. For example, in the English loan /ḅaṭṭaariyyi/"battery", emphasis falls on the consonantal segment. One would incline to say, therefore, that the traditional consonant-marking transcription of Arabic reflects adequately the structure of the language.

1.2 Phonemic Substitution

The fact that some American English consonants do not exist in the colloquial Arabic of Jordan poses a serious problem which affects the production of some English consonant phonemes by Arabic speakers as a result of interference from the native language (i.e., Arabic). Phonological interference results when a speaker perceives and produces the sounds of one language which is designated secondary (i.e., American English) in terms of another designated as primary (i.e., Arabic). Interference arises when a bilingual identifies a phoneme of the secondary system, and in producing it subjects it to the phonetic rules of the primary language (Weinreich 1953).

Phonological interference between English and Arabic appears to occur specifically in those areas where there are no native language parallels to the target language form (i.e., American English), or where the native and target language forms are distinctly different from each other. This type of overlapping is always ultimately caused by interference from Arabic.

1.3 Consonants:

On the phonological level one may identify two types of phonetic interference:

1.3.1 Underdifferentiation--occurs when two sounds of the secondary system whose counterparts are not distinguished in the primary system are confused. In this context, the English phoneme /p/ is perceived and produced as /b/ by most Arabic speakers. The reason for this confusion is that the phonemic system of Arabic lacks the phoneme /p/.

1.3.2 Overdifferentiation--involves the imposition of phonemic distinctions from the primary system on the sounds of the secondary system, where they are not required. For example, since consonantal length or gemination is phonemic in Arabic, native speakers of Arabic tend to lengthen the pronunciation of double consonants in a word like connect, which they produce as /kunnikt/.

Listed below are some of the major phonological difficulties encountered by most Arabic speakers, /p/ vs. /b/: since Arabic lacks the phoneme /p/, most Arabic speakers have difficulty learning and producing the English /p/ as separate from /b/, e.g. the word park is produced as /baark/ and pet as /bet/ or rather /bIt/. Actually, the /p/-/b/ distinction poses a serious problem for most Arabic speakers. Interestingly enough, a case of "hypercorrection" occurs among those who strive to avoid substituting /b/ for /p/ on the assumption that the failure to make the distinction is stigmatized.

Thus, the way in which some /b/ sounds are pronounced resembles those of /p/, which suggests an incorrect analogy. For example, the word paperback is pronounced as /peeparpaak/ instead of /peeparbaak/.

The case for other consonant phonemes seems to be less problematic. The phonetic descriptions of some English phonemes and their occurrences resemble those of their Arabic counterparts. For example, the following set of English phonemes cause no trouble to native speakers of Arabic: / b m f n k θ w y/. However , the confusion arises when the phonetic description of some English phonemes differs from that of their Arabic counterparts, e.g. /r/: American English /r/ is retroflexed while the Arabic /r/ is either flapped or trilled. This makes it difficult for an Arabic speaker to produce a native-like English /r/. According to Al-Ani (1970: 33), the Arabic /r/ is a voiced dental trill which is pharyngealized not only when it occurs next to pharyngealized consonants but whenever it is in the vicinity of /a/ or /aa/ as well.

1. 4 Vowels:

The basic Arabic vowel system consists of three short vowels: /a u i/ with their corresponding long forms /aa uu ii/. Two diphthongs are generally identified in the system of Arabic /aw/ and /ay/. On the other end of the spectrum, English has more vowels, glides and diphthongs than Arabic; moreover, the vowel structures of the two languages are quite different (DLI 1968:21).

A valid explanation for these difficulties may be attributed to the fact that there are two different ways of patterning the sounds of the two languages. Besides, the fact that most language learners pay great attention to the written form complicates the matter and leads to erroneous pronunciation.

Along the same lines, the discrepancy between English and Arabic orthography brings about further complications and confusions.

The vowel system in the colloquial Arabic of Jordan departs somewhat from the basic Arabic pattern stated above. It consists of three short vowels /a u i/ and five long vowels /aa uu ii ee oo/, which may be presented in the following table:

TABLE 3

ARABIC VOWELS

	Front		Central		Back	
	Long	Short	Long	Short	Long	Short
High	ii	i			uu	u
Mid	ee				oo	
Low			aa	a		

TABLE 4

AMERICAN ENGLISH VOWELS[4]

	Front	Central	Back
High	ii		uu
	I (i)		U (u)
Mid	e	ə	o
	ɛ (e)		
Low		a	

This chart is adapted, with modification, from Gleason 1966 (revised edition) and Ladefoged 1975.

One effect of Arabic on the pronunciation of English vowels is the insertion of the glottal stop /ʔ/ before initial vowels. As we may expect, those words in Arabic which are normally considered to begin with a vowel usually are initiated with a glottal stop before the vowel (Al-Ani 1970). There are thus no vowel initial words in Arabic.

The difficulty of producing the American English lax-mid front vowel /e/ = /ɛ/ suggests that most Arabic speakers fail to hear and produce the word ten as /tin/ and sex as /siks/. One way to explain the substitution may be attributed to the fact that the phonological system of Arabic lacks the vowel /e/.

An important point to consider here is that since Jordanian Arabic does have /ii/ and /ee/ in its inventory, one would expect Jordanian speakers to make the /i/ -/e/ distinction in English. My position on that is based on the fact that since laxness or shortness is the distinctive feature that marks the correct pronunciation of problematic words in this context such as ten, sex, better, etc., it is very unlikely that the focus of attention might be directed towards a categorically different tense feature, i.e., /ee/. It is thus legitimate to postulate that the auditory mechanisms of sound decoding perceive a lax /i/ instead of a lax /e/ = /I/ for /ɛ/ rather than the other way around (i.e., perceiving a tense /ee/). This implies the existence of hierarchies of features in the perception and decoding of sounds.

1.5 Vowel Reduction:

An important aspect of vowel production by Arabic speakers is failure to reduce certain vowels in their pronunciation. They tend to produce their vowels in the strong form. The fact that speakers of Arabic depend on spelling pronunciation leads them to pronounce all vowels in the same way (the strong form), failing to reduce them when necessary. This may be illustrated in the way they pronounce words like local, vowel, etc.

For instance, the word *local* is pronounced /lookal/ instead of /lookəl/, and *vowel* is pronounced as /vawil/ instead of /vawəl/. This may be attributed to the fact that Arabic phonology does not include rules of vowel reduction; on the contrary, Arabic speakers tend to apply a rule of vowel insertion to break up a consonant cluster. In Arabic, consonant clusters are restricted to two consonants. For this reason, most Arabic speakers insert an epenthetic vowel to break up the consonant cluster in some English words containing three or more consonants, such as *background* which they pronounce as /baakigraawnd/ instead, and the word *against* which they pronounce as /ʔageenist/.

1.6 Loanwords and The Impact of Phonology:

Linguistic borrowing has been defined by Haugen (1953) as the attempt to reproduce in one language patterns that have previously been found in another. This means that in his attempt to reproduce a new item, the speaker tends to reproduce the item in the context of the pattern of his native language. The reproduction may be more or less exact, as determined by the way in which importation and substitution have been blended. As Haugen (1972: 75) put it, the distinction between *importation* and *substitution* is important because it can serve as the typological classification of loans. Together they constitute the two ways in which linguistic *reproduction* can take place.

As far as loanword phonology is concerned the simplest and most common substitution takes place when a native sound sequence is used to imitate a foreign one. Full or complete substitution is characteristic of native language learners and is heard as a "foreign accent" by native speakers.

1.6.1The Assimilation of Loanwords

The complete assimilation of loanwords allows for the phonology of the recipient language to affect the pronunciation of these loans. As I pointed out earlier, some characteristic features of Arabic consonants, especially those of velarization and gemination, differ from those of English consonants. In other words, "very few English consonants have a one-to-one correlation with Arabic consonants, and this is reflected in the interpretation given by Arabic speakers to some English consonants" (Butros 1963:263). For example, English /t/ becomes Arabic /ṭ/ and /ṭ/ and English /s/ becomes Arabic /s/ and /ṣ/.

The corpus of loanwords present in the speech of Jordanians suggests that the phonological classification of loanwords may evidence two levels:

a. Loanwords marked by phonological transfer: these result from the reproduction of a model pattern in a manner which is very close to the original. A good example of this type is the word /?oorkistra/ 'orchestra'.

b. Loanwords marked by phonological substitution: these result from the substitution of native features for some features of the source language, e.g., /brootiin/ 'protein' where /b/ is substituted for /p/ of the model (Sa'id 1964). Subsequently, the phonological integration of loanwords into Arabic brings about a phonic interference which is conducive to phonemic substitution.

1.6.2 Loanword phonology may be described in terms of general phonological processes which control, to some extent, the most common sound changes in the speech of Arabic bilinguals. The sum of these rules, however, leaves some unanswered questions which are motivated by certain irregular forms or exceptions to any given rule.

a. Devoicing: a characteristic feature of loanword phonology is the devoicing of certain phonemes where they are usually voiced. Examples may be found in the following:

g ---> /k/

garage --> /karaaj/. Although /g/ is a phoneme in some dialects of Jordanian Arabic, speakers of other dialects produce the voiceless /k/ instead.

/v/ --> /f/

vitamin --> /fitamiin/

The change of /v/ to /f/ may be accounted for in light of the fact that Arabic does not recognize the voiced labio-dental fricative /v/ but recognizes its voiceless counterpart. Sa'id (1964:15) notes that the pairs (b,p) and (f,v) represent allophones of the phonemes customarily noted as /b,f/. /f/ is voiceless in most environments, but voiced before a following voiced stop or fricative except before /^{c}/ and /ḥ/, e.g. /wufuud/ 'delegations' with (f) but /wafd/ 'delegation' with (v), similarily, /daf^c/ 'pushing' and /ṣafḥ/ 'forgiveness' respectively. Khalafalla (1959:36) reports that in some dialects of Egyptian Arabic the phoneme /f/ is pronounced as /v/ before some emphatic consonants, e.g. /lavẓ/ 'pronunciation'.

In my opinion, the two arguments fall short of their goal as they fail to account for word like /ṛafḍ/ 'rejection' where the /f/ is followed by /ḍ/ which is both emphatic and voiced stop. Thus any listing of /v/ as a phoneme may only be accepted on the premise that it is a loan phoneme introduced through borrowing.

b. *Voicing*: as indicated earlier, the /p/ - /b/ distinction poses a serious problem to speakers of Arabic. The fact that /p/ is perceived and produced as /b/ by most Arabic speakers is an obvious case of phonic interference which may be identified (after Weinreich 1953 as 'underdifferentiation'). The fact that the phoneme /p/ is often replaced by /b/ and not by /f/ or any other sound indicates that the features bilabial and stop (rather than voicelessness) are the ones that are perceived by the hearer who then interprets or decodes it in the form of that phoneme of his own language which contains these features.

c. *Emphasis:* (also termed velarization or pharyngealization)

As stated earlier, very few English consonants have a one-to-one correspondence with Arabic consonants. The way /t, d, s/ are often interpreted as /ṭ, ḍ, ṣ/ by Arabic speakers is compatible with this notion. Jakobson (1957:15) calls these consonants "emphatic". The pronunciation of the words *ton*, *double*, *sauce*, etc., with initial /ṭ, ḍ, ṣ/ sounds explains the effect of emphasis on the speech of Arabic bilinguals. Although emphasis occurs with both consonants and vowels, its impact is more observable in consonants. "Emphatic vowels are interpreted as allophones of nonemphatic vowels, conditioned by the presence of emphatic consonants". The effect of emphasis on vowels is marked by the centralization of high front vowels, lowering of high back vowels, and backing of low vowels (Sa'id 1964:18-19). One obvious reason for reinterpreting the quality of English phonemes (i.e., emphasizing them) is Arabic spelling. Whereas Arabic spelling recognizes only four consonants which are emphatic in pronunciation /ṭ, ḍ, ṣ, ḍ/ other consonants, unmarked graphically for emphasis, may also be emphatic. For example:

/ḅaaṣ/ 'bus'
/ṛoob/ 'robe'

These forms have emphatic sounds which are not represented in Arabic orthography.

d. *Gemination*: the production of geminate sounds by Arabic bilinguals is a characteristic feature of loanword phonology. A major factor that affects the pronunciation of Arabic bilinguals is the influence of the spelling system in the source language (i.e., Arabic). Thus, the geminate pronunciation of certain consonants may be interpreted as a form of native language interference. Examples may be found in words like: *correct*, *arrive*, *connect*, *attend*, *support*, etc.

e. *Consonant Cluster Simplification*: a very significant aspect of Arabic phonology is its inherent resistance to three-phoneme clusters. Consequently, Arabic speakers tend to break up such clustering of consonants by inserting an epenthetic vowel. For example, the word *background* is often pronounced as /baakigraawnd/. Cluster simplification seems also to have affected final clusters by deleting the final consonant. This time, however, the deletion of the final consonant is not attributed to native language interference since Arabic does not resist two phoneme clusters, e.g., /bard/ "cold", /ḥarb/ "war", /jins/ "race", etc. The most reasonable explanation relates to underlearning the rules of the English language on the part of some Arabic bilinguals. Examples may be found in words like *insurance* and *different* which are often produced as /?inshurin/ and /difrin/ respectively.

f. *Flapping*: one consideration which may be interpreted as a phonetic problem rather than a phonemic one is flapping. In the case of /t/ and /d/, there is a general tendency among Arabic speakers to produce them as *dentals* rather than alveolars. The way Arabic speakers produce intervocalic /t/ amd /d/ excludes the possibility of flapping. They tend to provide a careful pronunciation of words like *matter*, *water*, *butter*, etc.

g. *Vowel Lengthening*: vowel lengthening is very common among Arabic speakers. Examples may be found in the following:

vitamin	/fitamiin/
carton	/kartoon/
album	/?albuum/
address	/?adrees/

This seems to be due to the fact that Arabic tends to produce stressed long vowels /aa, uu, ii/ in the final syllables of multi-syllabic words such as /tamariin/ "exercise", /m^{c}almiin/ "teachers", /mashhuur/ "famous", /mabluul/ "wet".

2. The Psychological Reality of Linguistic Change

It will be seen from the previous argument that where loanwords are concerned, phonological correspondences may be set up by comparing the segments of a word in the donor language with the corresponding segments in the recipient language. The variety of changes that English loanwords have witnessed throughout the adaptation process into Arabic do not go unnoticed. Furthermore, the linguistic change is motivated by a socio-cultrual assimilation and a psychological set up on the part of the speakers.

Three distinct trends manifest themselves in this connection:

2.1 Given that there is a systematic correlation between the linguistic behavior of a speaker and his social status, proponents of this trend attribute considerable prestige to lexical innovation and the notion of borrowing. With this in mind, they strive to show that their command of English is adequate and their pronunciation is near-native. Thus, the assimilation of English loans in the speech of this group is associated with high culture and prestige.

2.2 The second group comprises a majority that utilizes loanwords unknowingly--unintentionally--since a large number of loanwords is integrated into the colloquial and the standard varieties of Arabic. Naturally, the influence of native Arabic phonology on the production of such loans is tremendous. The morpho-phonemic adaptation of some loanwords into Arabic is rather complete.

2.3 Contrary to the first trend, there is a strong tendency among "classicists" (proponents of "purism") to resist all traces of foreign encroachment which violate the purity of Arabic. Thus, the effort to block all forms of linguistic change under the influence of a foreign language is particularly strong. As a consequence, the search for genuine Arabic terminology has always been encouraged in which Arabic terms would be coined for foreign concepts.

Notes

1. The geographic distribution of the potential phonemes /q g c z j d/ in the colloquial Arabic of Jordan is determined by the speaker's regional variety. The "Fallaḥi" variety, represented in rural areas, utilizes the potential phonemes /q c j d/, whereas the "Madani" variety, represented in urban areas, makes use of /z/, and the "Bedouin" variety, spoken by nonsedentary nomads, employs /g c j d/.

2. Emphasis is mainly characterized by a slight retraction of the tongue and raising of its back accompanied by constriction in the pharyngeal area. Emphasis is indicated by a subscript dot under the pertinent phoneme. Although it occurs with both consonants and vowels, emphatic vowels are intrepreted as allophones of non-emphatic vowels conditioned by the presence of emphatic consonants.

3. Gemination is the pronunciation of the same consonant twice without a pause. It involves the prolongation of the constituents and a longer closure of stops (Blanc 1952:73). The geminated consonant clusters contrast with their corresponding consonants, e.g.,

/ḥaḍara/	"he came"
/ḥaḍḍara/	"he prepared"
/kasara/	"he broke"
/kassara/	"he destroyed"

These examples show how the consonant is doubled, which makes it legitimate to refer to gemination as "doubling". Gemination in Arabic is usually represented by a diacritic mark called "shaddah", "w", which appears above the pertinent consonant, e.g., /madda/ "stretched" or "extended", is believed to have the underlying structure (mad-da), according to which it is pronounced. Consequently, Arabic speakers tend to make an enormous analogy by applying the same gemination pattern to English words such as, arrive and connect which they produce as /ʔarrayv/ and /kannett/ or /kunnikt/ respectively. In essence, gemination in Arabic is equated with vowel length which is phonemic in Arabic. Thus, speakers of Arabic tend to lengthen double consonants in English words such as, correct, arrest, etc.

4. The symbols in parenthesis marked with an asterisk are my own additions in order to show correspondence with the symbols used for Arabic vowels. Diacritics are used to distinguish between tense and lax vowels: /i/, /e/, and /u/ stand for the lax vowels /I/, /ɛ/, and /U/ respectively; /ii/, /ee/, and /uu/ stand for the tense vowels /i/, /e/, and /u/. Thus my reference to the /i/ - /e/ distinction is another way of referring to the /I/ -/ɛ/ distinction.

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ON GETTING A HEAD: A PROBLEM IN DEPENDENCY GRAMMAR

Jonathan Owens

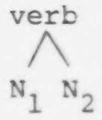
One of the problems within the dependency tradition has been finding criteria to distinguish various categories. Thus Vater (1978:39) concludes that it is impossible to find operational criteria for distinguishing actants from adjuncts (circonstances). One can ask a similar question of the notions 'head' and 'dependent'. In part 1 I will survey a number of operational criteria that have been proposed for defining these notions and also will examine some claims that have been made for the usefulness of recognizing head and dependent.

I will argue that none of the syntactic criteria achieve the desired results, and that in general a grammar can get along without recognizing 'head' and 'dependent' as primitive constructs. On the other hand, I argue (part 2) that the notion of dependency is a useful one, but that dependency should be understood simply as a bilateral relation between items.[1]

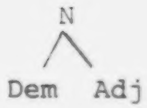
1. Dependency

Dependency grammar as described by Tesnière (1959), Hays (1964), and others assumes that grammatical relations can be described in terms of a relation between two types of elements, a head and a dependent. For Tesnière, typical dependency relations are as follows:

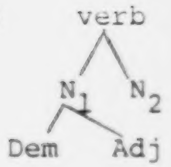
(1a)



(1b)



(1c)



A verb is the head of a sentence, governing up to three actants (object and subject), while a noun is the head to an adjective and demonstrative. (1c) would represent a sentence like,

(1d) $\dfrac{\text{that}}{\text{dem.}}\ \dfrac{\text{big}}{\text{adj.}}\ \dfrac{\text{man}}{N_1}\ \dfrac{\text{saw}}{V}\ \dfrac{\text{them}}{N_2}$

For Tesniere, head and dependent are givens. Implicitly for him these categories are defined lexically. Given his division of words into four classes--nouns, verbs, adjectives, and adverbs--in a relation between any two of these one is typically head, the other dependent. A verb governs a noun, a noun an adjective, and an adjective an adverb. However efficacious these assumptions are for his overall grammar--one justification he does give for this analysis (p. 105)--he presents no syntactic criteria to justify this categorization. In the rest of this section I will discuss various criteria by which a head and dependent have been identified.

1.1 Dependency based on form

The medieval Arabic grammarians developed a dependency grammar based to a large extent on morphological form. For them a single dependent (*ma^{c}muul*, 'operated on, governed') is governed by a single head (*^{c}aamil* 'operator, governor') and the dependency relation is typically shown morphologically by varying case (for nouns) or mode (for verbs) suffixes on the dependent item. This relation is summarized by the Arabic grammarian Al-Anbaarii (d. 1181) 'Governable items are those whose forms change according to the governor' ("*?al-mu^{c}rabu huwa maa tagayyara ?aaxiruhu be-tagyiiri al-^{c}aamil*") (p. 12).

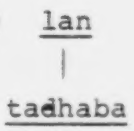
(2a) lan tadhab-a 'you will not go'

(2b) ra?a al-rajul-u al-mar?at-a 'the man saw the woman'

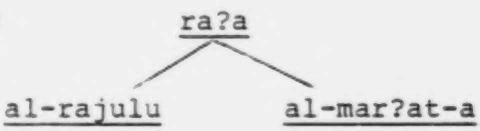
The case/mode suffixes are underlined. In (2a) the negative future marker lan governs the verb in the -a form (subjunctive), while in (2b) the verb governs the subject in the -u (nominative) form and the object in the -a (objective) form.

There are two drawbacks in basing the model on morphological facts. First, it does not give a unified description of sentence structure. This is apparent in example (2), which can be diagrammed as follows, applying Tesnière stemma to represent the dependency relations, with head (governor) on top of dependents.

(3a)



(3b)



In some cases the topmost item (head= in the sentence is a morpheme such as lan, while in others (more usually) it is a verb, as in (3b). This conclusion seems inevitable if one gives preeminent emphasis to morphological form in deciding what the dependency relations are.

Secondly, it is of limited value for universal grammar. In a language like East African Nubi (Owens 1977) which does not distinguish case or mode in any items (including pronouns) morphologically there would be no basis for deciding between head and dependent on the basis of form alone, which is what the present approach requires.

1.2 Head as obligatory or presupposed element

One of the most common criteria given is that head is an obligatory element in a construction. This argument is developed in slightly different form by Hjelmslev (1939) and Hudson (1982, 3/8), Robinson (1970) and Hudson (1980b).

Hjelmslev proposed that syntactic relations are bilateral and that they can be classified according to three types of relations, one of which corresponds to some extent with a dependency relation, relating head and dependent.

Determination: x determines y if x presupposes y without the reverse holding.

This is similar to one criterion Hudson (1982,3/8) gives for identifying the head: the presence of a dependent presupposes a head.

(4) the (big) men came. The big came.*

In this example the determined item (the noun) corresponds to the head in Tesniere's grammar, the determining to the dependent. The adjective determines the noun, and so depends on it (in Hudson's formulation, the presence of the adjective presupposes a head noun, though the reverse does not hold).

Robinson identifies the head item as the one which always characterizes a construction "...the category of the distinctive constituant is the sine qua non whose obligatory occurence characterizes the construction" (271). She notes that the characterizing item (the head) need not be the only obligatory element in a construction, but it will always occur.

For Hudson (1980b) the dependent item is optional in the presence of the head. He gives two examples--adjectives are always optional in the presence of a noun (e.g. (4) above), while the object is optional in the presence of a verb (considering the total class of verbs). Verb and noun would then be head items.

In all the characterizations the head will be obligatory. It is in the noun phrase, however, that this characterization of 'head' is the least warranted. The following table presents data from 9 languages and 6 language families. A '+' indicates that the category can occur without the other items on the list. Thus, one has for example,

(5)	English	Harar Oromo	
only N	men came	namnii ni-d'ufe	'the man came'
only Dem	those came	sun ni-d'ufan	'those came'
only Num	three came	seden ni-d'ufan	'three came'

(6)[2]	Arabic	Nubi	Oromo	French	English	Swahili	Tamil	Quechua	Mangarayi
Noun	+	+	+		+	+	+	+	+
Dem	+	+	+		+	+	(+)	+	+
Num	+	+	+	+	+	+	+	+	+
Adj	(+)	(+)				?		+	?

The implications for the criteria given above are as follows. For Hjemslev, neither numeral (for example) nor noun could be said to determine the other, since neither presupposes the other. Thus, his definition of determination cannot identify head and dependent in this case. Similarly, for Hudson (1982), where numeral and demonstrative would be head to a noun (cf. eg. (8) below) neither noun nor demonstrative/ numeral could be said to be head to the other, since neither are presupposed by the presence of the other. The same applies to the relation between the demonstrative and numeral.

For Robinson, for whom the noun is the head of a noun phrase, the noun cannot be said to be head since it is not an obligatory item. Given a transformational apparatus such as Robinson assumes for her dependency grammar, one might introduce both noun and numeral/demonstrative obligatorily in the base, then delete the noun in a later transformational rule to get examples like (5). However, this seems a rather arbitrary means to save the criterion, which seems to me to rest on an independent definition of 'characterizing category', a notion based on the idea of obligatory occurrence in all constructions.

Finally, Hudson's (1980) criterion based on optionality does not work, since it would be arbitrary to choose either numeral or noun as head since both are optional in the presence of the other (in Hudson, 1980, noun should be head).

Thus, the status of an item as head or dependent is largely irrelevant to considerations of optionality or determination (in Hjelmslev's sense) for an important set of noun phrase elements.

1.3 The usefulness of having head and dependent

Hudson has suggested three more reasons why it is desirable to distinguish head and dependent. These are perhaps not so much criteria for identifying heads and dependents as attempts to show their utilitarian value. Two of these (1.3.2/3 below) I think are valid, though one must use caution in determining just what the value is. Even accepting their usefulness, however, does not commit one to recognizing 'head' and 'dependent' as primitive concepts.

1.3.1 Semantics

Hudson (1982 3/8, 3/28 ff) claims that it is easier to formulate a rule relating the semantic features of an adjective to the noun it describes when the noun, rather than the adjective, is head. This is a general-claim of the same order as Tesnière's (cf. 1) whereby the overall grammar is simpler if dependency relations are formulated in this way. However, since he makes no attempt to write a grammar with adjective as head, the claim is not well substantiated.

In the adjective-noun relation (modifier-head) the adjective adds semantic information to the noun by filling a properties slot for the noun (3/29). However, Hudson has himself pointed out examples where as adjective's meaning must refer to the noun it modifies (1980b:502, 1982 2/45).

(7a) dry wine (dry$_1$ 'opposite of sweet')
dry paint (dry$_2$ 'opposite of wet')

Dry$_1$ is selected by wine and dry$_2$ by paint. However, the only basis by which the two meanings are distinguished is by reference to the nouns they modify--that is, the different meanings must be distinguished by reference to a 'substance' slot in the entry for the adjective.

It would seem then that adjectives have to be able to refer to their heads for their complete semantic structure. Since adjective and noun both require semantic slots for the other, there is a relation of mutual dependence between them, a situation compatible with the characterization of dependency I give below (2.1).

1.3.2 Cross-categorical generalizations

Hudson's arguments pertaining to cross-categorical generalization are tied in part to his analysis of the noun phrase starting from left to right, with the left hand member being head to a following right hand one (except for the adjective, which depends on the noun, Hudson 1981.11 ff.)

(8) both those two big men

He notes that by considering the determiner the head item his analysis allows English to be more consistently a head-modifier language, since in the noun phrase the head will precede its modifier and in the clause the verb precedes its modifiers (except the subject).

While Hudson's arguments are in general terms valid (as pointed out first by Tesnière) there is a danger in trying to explain too much in terms of head and dependent. In the present case one can detect a degree of circularity in Hudson's argument: heads precede dependents in English, so determiners can be considered heads, and this reinforces the efficacy of assuming that heads precede dependents.

However, this first of all assumes that languages tend to be typologically pure. However, the data presented in word order research (e.g. Hawkins 1980) shows languages as ranging from pure head-modifier to pure modifier-head types, with various mixtures in between (e.g. SOV and noun-modifier, as in Oromo).

Even accepting that languages tend toward purity here, for comparative purposes one has to adopt Hudson's 'determiner as head' approach throughout. But while this analysis makes English more typologically consistent, it does the reverse for other languages like Swahili. Using verb and noun as head, Swahili generally is a head-modifier language, with the exception that the subject precedes the verb.

(9) SVO mtu alivunja meza 'the man broke a table'
N-Adj mtu mkubwa 'a big man'
N-Dem mtu yule 'that man'
N-Num mtu mmoja 'one man'
N-Genitive meza yako 'your table'

Considering the determiner (demonstrative, numeral) as head, however, results in a less pure typology--V-O, head-modifier, but N-Det, modifier-head.

In short, one must exercise caution in using an appeal to cross-generalization to justify particular dependency analysis in particular languages.

1.3.3 Position

Finally Hudson says that dependents are positioned relative to the head, rather than vice versa. Again, while this may be true in the majority of cases, there are exceptions (as Hudson himself points out, 1982:2/43). An interesting point about sequence is that certain sequences occur with near universal regularity. Thus Greenberg (1966:68) notes that if demonstrative, numeral and adjective all occur before the noun, they must occur in that order. Similarly, in a number of languages, perhaps most, the word meaning 'all' tends to occur at the extremes of the noun phrase, either at the very beginning or at the very end.[3]

The regularity of these sequence patterns suggests an ordering based on semantic and pragmatic conditions quite independent of the status of an item as head or dependent.

So far, no convincing criteria have been found for distinguishing head and dependent. Before offering a different syntactic characterization of dependency one more criterion for identifying heads can be suggested.

1.4 Head as referentially central

A semantic basis for the distinction between head and dependent can be given as follows:

(10) The head is the item referentially central in a construction.

To take the noun first, the noun is referentially central in that all modifiers of a noun must be connected to a noun, either overtly or elliptically (pragmatically) understood. However, noun modifiers are not understood in similar fashion. If one says,

(11a) those/mine/all/a few came

the sentence is semantically odd unless one knows what head noun is being referred to. However, in,

(11b) those men came

or (11c) good men came

one does not have to supply an adjective modifier in (11b) or a demonstrative in (11c) in order to make sense of the sentence.

With the verb, the main verb will be considered the head to an auxiliary modifier (though cf. 2.23 for discussion).

(12a) he may (ill-formed unless a main verb is understood).

(12b) he came (no auxiliary need be interpreted)[4].

Finally, between an adjective and adverbial modifier the adjective will be considered the head.

(13a) Was he big? Very. (i.e. big)

(13b) He was big. (no adverbial modifier need be inferred)

Note that this method of identifying the head corresponds to Tesnière's selection of heads and dependents (section 1), and it also fits fairly well with the method I outline in the next section (except for the verb auxiliary).

2. Bilateral Dependency

2.1 To this point I have argued that no clear syntactic criteria for recognizing a head have been found. Nor do I think that Hudson's most recent position (1982) will solve this problem. He says that although there is no single criterion or criteria which always work to distinguish head and dependent, when considered together criteria like the above (except 1.4) will result in choosing one item as head.

In fact, it was seen that none of the criteria put forward work very well in distinguishing head and dependent, so it is hardly reasonable to claim that a set of faulty criteria should work any better. In any case, if one can find one basic criterion for distinguishing head and dependent, then I think it would be preferred to a disparate set of criteria, and in this section I will suggest that such a criterion can be found.

If my operational objections to the notions of 'head' and 'dependent' are valid, then it might be relevant to look for another characterization of dependency. Moreover, something has to be found, for otherwise one would be in no position to explain why sets of words do form recognizable groups, like 'noun phrases' and 'sentences'. This indeed is perhaps the basis for recognizing dependency relations, to explain connectedness, why items group together.

I would suggest that 'dependency' be understood as follows:

(14) Items in a dependency relation are bilaterally related to each other.[5]

This makes no mention of head and dependent, and so avoids the question of how to identify one or the other.

In standard dependency grammar (Robinson 1970:260), (Hudson 1982:3/11) one explains the clustering of items by saying that dependents tend to cluster around their heads. Thus, if an adjective is dependent on a noun which is in subject position, then the adjective will also occur in the subject position, not somewhere else. In my revised characterization of dependency the clustering of items will be explained by saying that items in a dependency relation cluster together. Thus if an adjective and noun are related to each other, they will occur together, and follow each other around whether in subject position, or wherever.

Of course, at this point I do not define head and dependent so I cannot explain NP and clause order any more specifically than this. I will return to this point later in this section.

This formulation avoids one embarrassing problem for head-dependency analysis in regard to determination of morphological form. In a language with morphological case it would generally be said that a verb determines the case forms of its actants. Thus, in Classical Arabic the verb governs its subject in the nominative and its object in the accusative (cf. 1.2)

(15) ra?a zaydun al-rajula 'Zayd saw the man'
nom. acc. (the man)

On the other hand, where a verb agrees with its subject in some category it will be the subject noun that determines the form of the verb. This can also be illustrated in Classical Arabic.

(16) zaydun đahaba 'Zayd went'
hindun đahabat 'Hind went'
al-rijjaal-u dahabuu 'the men went'
pl.

A grammar which recognizes the verb as head to a dependent subject, the standard dependency analysis, is hard put to explain why the features of the dependent item determine the form or the head while at the same time being governed (in a particular case) by the verb (as in Hudson 1982:3/35)[6].

Hudson (1982:3/37) explains subject-verb agreement by noting that agreement always proceeds from the fixed category--number, gender are fixed in the noun and so determine the form of the verb. Still it is the case that the 'head' is the item whose form is determined. In the formulation of (14) no anomaly is involved; one can expect items in a dependency relation to have this relation expressed formally in certain ways, by overt case marking and agreement for example, and one can allow the direction of agreement to be determined by other principles, such as the one Hudson proposes. For dependency relations, all that agreement or case marking shows is that a relation exists between the items concerned.[7].

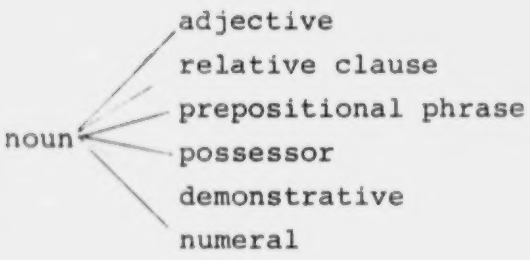
In my formulation (14) there is still a problem in explaining sequence. While some word order tendencies are not explicable in terms of head and dependent (cf. 1/3.3), a great many are. Thus, word order studies virtually always refer to the categories of head and dependent or something equivalent (Tesnière 1959, Greenberg 1966, Hawkins 1980). Without a characterization of 'head', however, these important generalizations would be lost to dependency grammar.

I think the notion of head can be defined as a derivative concept as follows.

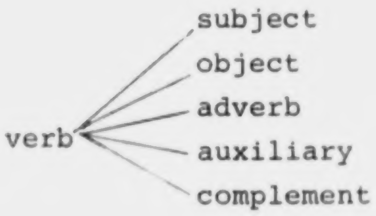
(17) Given a set of bilateral dependency relations the head is the item which contracts relations with all the other items, i.e. the head is the item with the most general distribution.

One would have the following relations, where the connecting line simply represents a bilateral dependency relation, a relation connecting items grammatically and semantically without reference to their status as head and dependent.

(18a)



(18b)



(prove him wrong)

Verb and noun are heads, since they have relations with all other items.

I can note that this definition of 'head' accords quite well with the semantic definition given in (1.4) (as well as with Tesnière's). It also agrees with Hawkin's assumptions that for word order purposes, verb and noun are heads (operands, cf. following discussion). This convergence can be taken as independent confirmation of the efficacy of this characterization.

2.2 There are four qualifications to be made here.

2.2.1 First, this definition does not have a characterization of head in the case of pre- and post-positions and their object, since there is only one object and one adoption. However, there is a close relationship between the noun possessor and adposition object, with object equivalent to possessor.[8] Hawkins (1980:214) notes a high position correlation between postposition, possesser noun order (head first) and preposition, noun possessor order (head first) and conversely a slightly smaller correlation between pssr-noun and post-position and noun pssr, preposition, Adposition + object may thus be able to be considered a special type of noun-possessor relation.

2.2.2 A similar case involves degree adverbs, very long. Since there are only two items in the relation, there is no reason to consider either as head. For this I would propose the following. Between X and Y, if X forms a syntactic relation with Z, and Y has no syntactic relation other than with X, then X is head to Y. In

(19) a very big man came
Y X Z

the adjective big is related to both very and man, very only to big, so big will be head to very, as one would expect from word order tendencies (Hawkins 1982:4).

2.2.3 I think one place where both (18b) and the semantic criterion of 1.4 (e.g. 12) are wrong is the auxiliary. These have auxiliary as dependent on the main verb, but Hudson has argued that the auxiliary is head to the main verb, and for word order purposes this may be the 'correct' analysis (at least in Oromo, Swahili, English, French, Nubi, Arabic, and Tamil, as well as Greenberg 1966:67; see also n. 9).

This discrepancy might be explained by noting that where auxiliaries have essentially the same morphological characteristics as a main verb (e.g. inflect for person, gender, number, tense, mood, etc.) the auxiliary is a verb which also has a copular or main verb function. The verbal complement to an auxiliary thus essentially fills the position of a nominal, adjectival or locative complement to the auxiliary.

ENGLISH

(20) he is a man
he is going

SWAHILI

(21) alikuwa mzuri 'he was good'
alikuwa akitembea 'he was walking'
he walk

ARABIC

(22) huwa kaana jayyidan 'he was good'
huwa kaana yadhabu 'he was going'

NUBI

(23) uwo gu-ruwa ina 'he is going there'
uwo gu-ruwa akulu 'he is going to eat'

OROMO (HARAR)

(24) isaan mana jiran 'they are at home'
they home be at-pl.
isaan deemu jiran 'they are going'

TAMIL

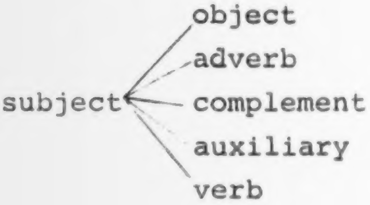
(25) aver vətil iruper 'he will be at home'
he home at
aver saapat kondu iruper 'he will be eating'
eating

If one analyzes the auxiliary-main verb relation as that of verb (aux) to complement (main verb/noun/adjective/locative) then the discrepancy relating to auxiliary verbs are removed--the auxiliary is head to a main verb in the same way it is head to a nominal or adjectival complement.[9]

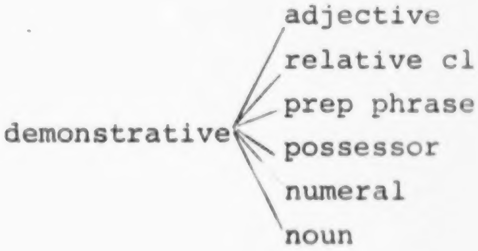
2.2.4 The final problem needs the most clarification. Why should verb and noun in (14) be assumed to contract all the bilateral relations? The answer is that they do not. In principle any two items can. However, verb and noun are distinguished from the other items by the stipulation that the head be in a relation with *all* other items. In some cases an item is excluded from headship for fairly obvious reasons. If, for example, the object contracted relations with all the other elements, and was thereby considered head of the clause, in the case of intransitive verbs there would be no head. Similarly, in the noun phrase, if numerals were head, then uncountable nouns would occur with no head. Note that numerals and objects are excluded here on different grounds than optionality (1.2). An object is not optional for an intransitive verb, nor is a numeral for an uncountable noun, since in no instances do objects or numerals occur with these items.

Object and numerals are excluded from headship status (for purposes of sequence) by the stipulation that the head must be in a relation with all the other items, and they do not occur with some of the items. Still, there are at least two other items which are not immediately excluded on this basis, the subject of the sentence, and the demonstrative in the NP.

(26a)



(26b)



Treating the subject in this way is implausible. Recall the definition of dependency I use says that items in a dependency relation are bilaterally related to each other. However, there is no bilateral relation between he and quickly in he ran quickly, as can be seen by comparing it with he stayed quickly* Clearly verb and adverb must be in a relation here, but not subject and adverb (though examples like this do not mean that the verb is the head, only that the verb and adverb are in a relation).

For the demonstrative arguments to exclude the analysis of (26b) are less obvious. The demonstrative co-occurs without a noun with all the complements in the right-hand column of (26b) except the adjective. It also frequently agrees with other elements like a noun does (both those/that men/man).

Against this in English one does have

(27) *those men's cars*

but *those's cars** (cf. *men's cars*)

which shows that the demonstrative-noun relation is more restricted than noun-noun (pssr-pssd). A similar example could be cited for Oromo, and perhaps other languages as well.

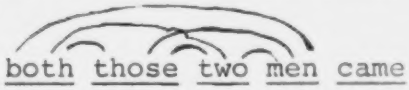
3. In this paper I have shown (1) that previous criteria used for identifying head and dependent are inadequate; (2) that a grammar which defines dependency in terms of bilateral relations, without the notions 'head' and 'dependent', can explain why certain sets of items tend to form groups, and (3) that for purposes of sequence generalizations, to the extent that they are needed (1.3.3), an adequate notion of head and dependent can be arrived at based on the definition of dependency in terms of bilateral relations. Head and dependent thus become derivative concepts based on the prior identification of bilateral dependencies.

One consequence of this characterization of dependency is that it allows a great many more dependency lines in a grammar (as argued for by Mitchell, 1975) than previous definitions and practive. Where one has only head and dependent, a dependent item can (by definition, Robinson, 1970[10]) be related to only one head. This leads to a search for the head, where by some criteria one item is head to another, but by another it is its dependent (cf. discussion around examples (15, 16) for instances of this). In

(29) *both those two men came*

both is in a relation (plurality) with *those*, *two*, and *men*, and in a special relation (duality) with the numeral since it determines that the numeral *two* occur (*both three**). Thus, perhaps *both* should be considered head to *two*, and perhaps to *those* and *men* as well, requiring plural forms in the demonstrative and noun. But in Hudson (1982) *those* is head to *two*, and in Tesnière (1959) and Robinson (1970) *men* would be its head.

But as seen above there is little to be gained by designating any of them as head, at least so far as this phrase goes. Headship does not explain sequence in this case (1.3.3) and all the items in the phrase here are optional (1.2). On the other hand there is agreement in plurality between all of them, which can be taken to show that all are related to each other in terms of this category and a dependency line between both and two allows one to explain the special relationship between them in terms of a dependency relation. In my definition one simply has a series of bilateral relations here.



(30) both those two men came

Furthermore, if one needs a head in the phrase, then it can be provided for by the definition of (17)[11].

*I would like to thank S. Shivaji of Yarmouk University Mathematics Department for the Tamil data and Ibrahim Hasan for the Harar Oromo. I benefitted from comments by R. Hudson on an earlier draft of this paper.

NOTES

1. Recently the notion of 'head' has gained greater importance within generative grammar (though given the constituency framework of generative grammar not the idea of dependency). However, 'head' is defined in a purely formal way, as the lexical category X dominated by X^n for instance (Jackendoff 1977:30). No attempt is made to explain why the categories chosen as heads should in fact be so chosen (e.g., why should noun and not determiner be head of the noun phrase; cf. 2.2.4)

2. Mangarayi is an Australian aboriginal language.

French nouns must occur with at least an article. I disregard the French suppletive demonstratives ca--ce/cet/ces. Tamil also has a different demonstrative according to whether or not it is self-standing.

For adjectives, only Quechua unequivocally allows an adjective to be the sole constituent of a noun phrase (Cole, 76), though some of the others allow an adjective without a noun in certain contexts. In Arabic, definite article + noun (al-ka'biir 'the big (one)') is a fully productive construction; East African Nubi (an Arabic Creole) allows adjective + demonstrative, ka'bir de 'the big one' (and I suspect Swahili allows this too, yule mkubwa 'that big one').

3. This is the case in English, French, Nigerian Arabic, Oromo, Swahili, Tamil, and the Creole languages cited in Owens 1980--Sranan, Sango, Haitian, Nubi, and Cameroon Pidgin (though I give examples only for Sranan there, an examination of the sources will show this to be the case).

4. In the few instances where a verb can be ellipted, it will necessarily be understood. For instance, in gapping,

I ate the main dish and she the dessert

the verb ate must be understood in the second clause.

5. This is essentially the characterization of dependency used in Owens 1977. I take the notion of 'relation' as a primitive. Evidence that items are in a relation can be shown, inter alia, by the fact that they agree in some morphological category; are in a relation of morphological governance; and that they exhibit selectional restrictions between them, and so on.

6. Thus Hudson (1980a:185) says that if there is morphological determination it is always the head which determines the morphological form of the item it is related to.

7. Abraham (1978:700 ff) has discussed functional factors relevant to the development of case forms, factors which obtain independently of the status of an item as head or dependent.

8. This equivalence is readily apparent in many languages. For Booran Oromo, for example, I have argued (1982:60) that on syntactic grounds post-positions are a sub-class of noun.

9. This analysis runs counter to X-bar analyses (Jackendoff 1977:46; Lightfoot 1979 (using a slightly different system)) where auxiliary is a specifier (modifier) rather than head. Greenberg's data (quoted in Hawkins 1982"2) however, shows auxiliary-verb order to be overwhelmingly harmonic with head-modifier (operand-operator). Thus, of 9 verb-aux languages in his data, all but one are SOV and all are postpositional (head last); of 10 aux-verb languages all are SVO and VSO and all but one are prepositional (head first).

Hawkins points out (1982:15, 24) that Lightfoot's treatment of specifier, that is, demonstrative and auxiliary, does not in general give useful word order results, since the specifiers do not consistently appear on the same side of the word they specify (noun/main verb). Hawkins implies (17, 25) that for word order purposes the demonstrative should be treated like any other modifier and not singled out in a special category like a specifier. I would add that the word order data also shows that the main verb should be treated as a modifier to the auxiliary, which is in accord with the grammatical analysis of auxiliaries I give here.

10. Hudson (1982:4/10) allows an item to have an unlimited number of heads, though in practice the only multiply-head constructions for him involve 'movement'--raising, relativization, and comparatives. Demonstratives and numerals have only one head and take one dependent.

11. The question of how, in dependency terms, the verb is related to subject in the present framework is beyond the scope of this paper.

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NEGATION IN JORDANIAN ARABIC:
A DEVELOPMENTAL STUDY

Oglah Smadi

Introduction

The systematic study of negation acquisition goes back to the early years of this century. Wode (1977) surveys those studies in German and French which were carried out between 1907 and 1947. More comprehensive studies of negation acquisition were done during the sixties (Klima 1964; Klima and Bellugi 1966; Bellugi 1967). Such studies were an attempt to find out evidence for the psychological reality of the linguistic description proposed by the generative transformational theory. Klima, Bellugi and McNeill (1970) claim that stages of negation acquisition by American children coincide with the steps of the derivation of negative sentences in transformational grammar. Although Bloom (1970) differs with Bellugi (1977) in the interpretation at the Neg + S structure and so does not consider this structure as the first stage of negation acquisition, she agrees with her as well as with Klima and McNeill in their claim that "stages children pass through in acquiring the negative system of English run parallel to the stages of the derivation of negative sentences in transformational grammar" (deVilliers et al., 1978:104). Omar (1973) and Lange and Larssen (1973) also followed Bellugi's framework in their studies of negation acquisition in Egyptian Arabic and Swedish respectively.

This claim has been challenged by other findings in the literature on the acquisition of negation by children of different language backgrounds (deVilliers et al., Wode 1977; Park 1978). The present study and those of Wode and Park make it dubious to assume that the data on negation acquisition provided by Klima, Bellugi, McNeill and Bloom are relevant as a test of the transformational model.

The Subject, Data Collection, and Analysis Procedure

The subject of the study is a healthy female child whose age was 19 months when the recording of her speech started. JA is the language used at home. A thirty-minute speech session was held and recorded every two weeks in which the subject and researcher or any member of the family participated. A record of selective samples of her daily spontaneous speech was taken and transcribed in a separate diary.

The mean length of the subject's utterances (MLU) was calculated following Brown's rules (1973:54) with the necessary adaptations for Arabic. The subject's utterences under analysis were transcribed chronologically and with the number of the tape, with the aim of finding out the developmental nature of the acquisition of the grammatical structures under study.

A Sketch of Rules of Negation in JA

1. Free morphemes

   a. la? with the alternative forms lā and la?ah

$$S \longrightarrow \left\{ \begin{array}{lllllll} \text{la?} & + & (S) & & & & \\ (S) & + & \text{la?} & & & & \\ \text{l}\bar{\text{a}} & + & VP & + & \text{sh} & + & (X) \end{array} \right.$$

la? mish hon: 'No, he isn't here.'

lā: 'No'.

huwwa la?ah: 'He, no.'

lā tukitbiish iddars: 'Don't write the lesson.'

b. Wala

S → (X) + Wala + NP

Wala + ?ishi: 'Not a thing.'

Inta rūh wala zalamih hnāk: 'Go, no man is there.'

c. mū or mish:

S → Subj. + mish + pred

?inta mish rāyih: 'You are not going'

S → (X) + mish + rah + V + (Y)
'am
?ā^{c}id

hiyya mish ^{c}am btuktub: 'She isn't writing.'

S → (X) + mish + modal + V + Y

modal lazim, mumkin, yimkin

?irrajul mish lāzim yil^{c}ab:
'The man must not play.'

d. The bound morpheme ma...sh

S → Topic + ma Prep P sh + Subj
comment

?ilwalad ma^{c}indush ktāb: 'The boy doesn't have a book.'

S ma Pr pers sh + Pred
Pr indef

mantush katbīn: 'You didn't write'. OR
'You aren't going to write.'

maḥaddish barra: 'Nobody is outside.'

S ⟶ (X) + ma sh + (Y)
?ana mashifithāsh: 'I didn't see her.'

S ⟶ (X) + ma Mod sh + V + (X)
Mod time marker

huwwa makanish badduh yīji: 'He wasn't going to come.'

S ⟶ (X) + ma imperfective sh + (Y)
matigrāsh: 'Don't read.'

e. la ... wala

S ⟶ la + NP + wala + NP
lana wala ?intih: 'Neither me nor you.'

f. lā? with the suffix sh in the imperfective

S ⟶ lā + V imperfective + sh + (X)
lā truhish barra: 'Don't go outside.'

The Developmental Sequence of the Negative Rules in JA

Before discussing stages of the acquisition of the negative system by the subject, the terms anaphoric and non-anaphoric negation have to be clarified. 'Anaphoric' means that the negative word in a negative utterance refers to something said previously, i.e. negates a previous utterance, and the sentence with which this negative word occurs is "an affirmative contradiction." Thus 'no water' might have been said in response to 'it's soup' or 'no mother' in response to 'it's father'. Non-anaphoric means that the negative relationship holds between the negative word and some part of the whole utterance with which it occurs, e.g. 'I don't want to go'. Here the negative word is an intrinsic part of the utterance.

The use of /mū/ or /mish/ is predicted to appear early in the subject's speech since it does not require any change in the structure of the individual words it negates. The mastery of the acquisisiton of /ma ... sh/ is supposed to come later in the course of negation development because its use requires morphophonemic changes that have to take place in the words it is attached to such as the lengthening of the final vowel and the shifting of the major stress to it.

The proposed tentative boundaries between the stages of the acquisition of negation by the subject will be determined by the syntactical development of the negation transformations and their forms in the subject's speech.

Stage I: One-word Negation

The free morpheme /lā/ was used by the subject in Tape 1 (age 19.5 and MLU 1.22). Other variations of /lā/ were used in the data as /la?ah/, /la?/ and /na?/. I can safely say that the one-word negation morpheme was used by the subject before age 19 months since children tend to use /nā/ or /na?/ as early as the age of 15 months. The negative system at this stage can be summarized as:

$$S \longrightarrow /l\bar{a}/$$

Stage II

New developments in the negative system mark this stage such as the use of the negative bound morpheme /ma ... sh/, the negative particle /mū/, non-anaphoric negation, and the negated imperative.

1. The bound morpheme /ma ... sh/ is not fully mastered before tape 15 (age 26.16 and MLU 2.37). The prefix /ma/ is used in tape 15 while the suffix /-sh/ is used alone before this tape. It appeared in tape 4 (age 22.1 and MLU 1.65) in such utterances:

   /?iddish ?ana ?isshrab/: 'I don't want to drink.'
   /hibbūsh ^{c}arabi/: 'I don't like Arabic.'

   The full mastery of ma ... sh is never attained by age 3. Errors in its usage still occur in the subject's speech.

2. Non-analphoric negation is used for the first time in tape 4 in the following utterances:

Adult	Child
/?i^{c}tīh laddāha/:	/lā ?iddāda/:
'Give it to your sister.'	'No my sister.'
/tishrabi h̄alīb/:	/lā hīb/:
'Do you want to drink milk?'	'No milk.'

Such appearance contradicts Wode's findings (1977) in which he states that anaphoric negation appears before non-anaphoric. Anaphoric negation appears later as part of the syntactical developments of the third stage.

3. Repeating the negativity to stress the subject's denial or refusal of what the adult suggests, requests or asks is a linguistic device that appeared in the data in tape 4. /lā/ and /mū/ or the bound morpheme are used in such construction as illustrated in these examples:

Adult	Child
/*tithammami*/:	/*lā* *?iddish* *hammam*/:
'Do you want to take a bath?'	'No, I don't want to take a bath.'
/*hēk* *?arubtuh*/:	/*lā* *mū* *hēk*/:
'Can I tie it this way?'	'No, not this way.'

4. The negative particle /mū/ is used for the first time in tape 9 (age 24.3 and MLU 2.56) in an initial position, and continues to appear in this position at this stage although the invariable usage of /mū/ in other positions is allowed in the subject's dialect. Such utterances were produced at this stage:

/*mū* *shāttih*/:	'She isn't good.'
/*mū* *hāi*/:	'Not this.'
/*mū* *mamma* *hōn*/:	'Mamma isn't here.'

5. The negated imperative occurs for the first time in tape 13 (age 25.28 and MLU 2.51) but without the correct imperative marker /ti-/. Such a form continues to occur up to tape 18. The subject's rule of negating the imperative simply reads as follows: "Add /lā/ initially to the imperative sentences" The following examples illustrate this rule:

/lā ?izzali/:	'Don't get down.'
/lā ?izza^{c}īh/:	'Don't tear it.'
/lā ?ittaḣ/:	'Don't open (it).'

The production of the imperfective form of negated imperative occurs at this stage but without using the suffix /-sh/. Here are some examples:

/Muna lā tulīha/:	'Muna, don't get it.'
/lā ta^{c}mīha/:	'Don't feed it.'

The negation system of the subject at this stage may be summarized as follows:

1. S----> /lā/ + (S)
2. S----> (NP) + VP + /sh/ + (X)
3. S----> (lā) + VP + /sh/ + (X)
   /mū/ + X
4. S----> /mū/ + S
5. S----> /lā/ + V + X
   imper
   imperfective

Stage III

More linguistic developments in the negation system occur at this stage such as the emergence of the correct usage of /mā ... sh/, the production of /wala/--"not a ..." negative forms, anaphoric negation, the use of /mū/ and /mish/ in sentence initial and medial position, and the beginning of the correct usage of the negated imperative forms.

1. /ma ... sh/ is used correctly in tape 15 (age 26.16 and MLU 2.37) and in the successive tapes together with the /-sh/ form also. Here are some examples:

/madallish ?ahwah/:	'There is no coffee left.'
/?ana mashāfish/:	'I didn't see.'
/hiyya nāmatish/:	'She didn't sleep.'

The incomplete mastery of the /ma ... sh/ morpheme even by age 36 months might be due to the complex linguistic structure of this negative form. To produce the /ma ... sh/ negative structure correctly, a native speaker of JA has to prefix and suffix the constituent to be negated and to perform the needed morphophonemic changes on the same constituent, such as supplying the correct subject marker before the suffix /-sh/.

2. Anaphoric negation occurs for the first time in tape 16 (age 27.9 and MLU 2.58) and continues to occur in the data in the same form as in the following utterances:

Adult	Child
/?atla^{c}/:	/la? ?izzali/:
'Can I go up?'	'No, get down.'
/?u^{cc}ud/:	/la? ?īmi/:
'Sit down.'	'No, stand up.'
/dalli hōn/:	/la? ?iddi rūh/:
'Would you stay here?'	'No, I want to go.'

The anaphoric negation forms can be easily differentiated from the non-anaphoric forms in the subject's speech in two ways: the use of /la?/ and the short pause, after its production in the case of anaphoric forms.

Contrary to Wode's (1977) proposals, anaphoric negation was late in its emergence in the subject's production.

3. /mū/ appears in a sentence-medial position in tape 19 (age 28.21 and MLU 2.49) while /mish/ starts to emerge as a substitute to /mū/ in tape 35 (age 36.2 and MLU 3.64). both of these particles are used correctly at this stage initially and medially. Here are some examples:

   /hād mū tābi/: 'This is not my book.'
   /mū ma^c ?ubiz/: 'Not with bread.'
   /mish hilwah/: 'Not beautiful.'
   /hād mish ilha/: 'This is not hers.'

4. The correct use of the negative imperative rule emerges in tape 28, (age 32.24 and MLU 3.32) in the following utterance:

   /lā tṡakrīsh ?ibbāb/: 'Don't shut the door.'

The subject's acquisition of the negative imperative rule is still incomplete since utterances with /-sh/ or /t-/ still only appear in the subject's speech, as in the following utterances:

/lā txabbi dujji/: 'Don't hide my drawer.'
/lā rūhīsh/: 'Don't go.'

The incomplete acquisistion of the rule that generates the correct utterances in such structures may be due to the difficult nature of the morphophonemic changes in the negated constituent that its application requires. Unless the rule that enables the child to produce correctly the subject or object markers is acquired, a native speaker of JA will make errors in producing the negative imperatives.

5. /wala/ occurs in tape 28 together with /?ishi/ "thing" to mean "nothing or not a thing" and both continue to appear in the data together. Here are some examples:

Adult	Child
/shū baddik/:	/wala ?ishi/:
'What do you want?'	'Nothing.'
/shū ^{c}ala ^{c}yuuk/:	/wala ?ishi ^{c}ala ^{c}ūni/:
'What is on your eyes?'	'Nothing is on my eyes.'

/Wala/ is used also in JA with nouns and pronouns, but the subject seems to have acquired /wala ?ishi/ as one inseparable unit or word since they always occur together in the adult's speech.

The negation system of the subject at this stage may be summarized as follows:

1. a: S----→ (NP) + VP + /-sh/ + (X)

b: S----→ (NP) + /ma V sh/ + (X)

2. S----→ /lā/ + (S)

3. S----→ /la?/ + S

4. S----→ /mū/ + S
/mish/

subj. + /mū/ + Pred
/mish/

5. $V_{(imper)}$ ---------→ /lā/ + $V_{(imperfective)}$ + X
$V_{(imperfective)}$ + /-sh/

6. S-----→ /wala ?ishi/ + (S)

Discussion

The full acquisition of the negation system in JA by the subject is yet incomplete; errors in the use of the negative bound morpheme /ma ... sh/ and the negative imperative still occur in her speech. The /lā ... wala/ negative construction has not yet appeared in her speech. It is predicted that the acquisition of the negation system will be complete by the age of 5. This prediction is based on information collected from another subject by an M.A. student at Yarmouk University (Barham, 1980).

The findings affirm the developmental nature of the process of the acquisition of the JA negation system as well as the developmental sequence, the rules that generate the negation structures pass through in the successive stages of negation acquisition. A rule might be modified more than once depending on the developing linguistic competence of the subject. This is typical of all children whose acquisition of their native languages are reported in literature. The development of the /ma ... sh/ rule is a case in point, where its linguistic complexity determined its order of appearance and use.

The findings of the study don't support the developmental stages proposed by Bellugi (1967). As a framework for the stages of English negation acquisition, her proposals were found incomplete and wanting. In spite of the differences between the present findings and his own findings, Wode's framework (1977) more accurately reflects the process of negation acquisition. Paralleling Wode's study, acquisition of a negation system passes through four stages of development: three of them are described in this study, and the fourth is in the making. However, the features that characterize some of these stages are different from those which Wode describes. Thus Wode considers anaphoric negation as a predecessor to non-anaphoric. This might be argued in the case of Swedish (Lange and Larssen, 1973), but not in German where Park (1973) found that non-anaphoric negation appears before anaphoric. My findings affirm Park's but contradict them in that anaphoric negation is found to be one of the earliest linguistic developments at Stage III of negation acquisition. Wode tries to find support for his findings in Arabic (Omar 1973). She insists that Egyptian children, among other children, use first anaphoric negation. This is quite contrary to Omar's data (p. 125). The four utterances Omar gives as examples of Stage I are actually both anaphoric and non-anaphoric negative structures.

Wode also considers the intra-sentential negation as Stage III of negative acquisition. The findings of this study show that this form of negation starts as early as Stage II, although its full acquisition is attained at Stage III. The intra-sentential negation structures /ma ... sh/, /-sh/, /-mū/, and negated imperatives appeared at Stage II. Wode believes that at Stage III "numerous language-development peculiarities" still exist in the child's language (p. 100). Those peculiarities could not be other than the errors which the child still makes in producing the language which means that some of his rules are still incompletely mastered at that stage.

The three stages the subject passed through in her acquisition of the JA negation are, herein, summarized within a framework that can ve comparable with Wode's (p. 100-101):

Stage I: One-word negation

S---→ la?

Stage II:

(1) Non-anaphoric negation

S----→ lā + S

(2) Intra-sentential negation

a. -*sh* negation

S----→ (NP) + VP + -*sh* + (X)

b. Double negatives

$$S \dashrightarrow \underline{l\bar{a}} + \left\{ \begin{array}{l} VP + \text{-}\underline{sh} \\ \underline{m\bar{u}} + X \end{array} \right\} + (X)$$

(3) mū - negation

S----→ *mū* + S

(4) Negated imperatives

$$V_{(imper)} \quad \underline{l\bar{a}} + \left\{ \begin{array}{l} V_{(imper)} \\ V_{(imperfective)} \end{array} \right\} + X$$

Stage III

(1) Intra-sentential negation

a. *ma* ... *sh* negation

S----→ (NP) + *mū* V sh + (X)

N.B. Errors in the production of this negation form still occur.

b. Negated imperatives

$V_{(imper)}$----→ *lā* + $V_{(imperfective)}$ + *sh* + (X)

N.B. Errors in the production of this negation form still occur.

c. *mū* negation

$$S \dashrightarrow \left\{ \begin{array}{l} \underline{m\bar{u}} + \underline{sh} \\ subj + \underline{m\bar{u}} \end{array} \right\} + pred$$

d. *mish* negation

S----→ *mish* + S

subj + *mish* + pred

e. *wala* negation

S----→ *wala* *ishi* + S

(2) Anaphoric negation

S----→ *la?* + (S)

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مشكلات تدريس الاصوات العربية
للراشدين الاوروبيين *

فائز فارس الحمد

اللغة نظام صوتي يسعى الانسان الى السيطرة عليه ليعينه على الاتصال بالآخرين ، وليمكنه من الافصاح عما يدور في نفسه ، وليقدره على الابداع الادبي ·

واللغة العربية مجموعة من القواعد الصوتية يتبعها الانسان العربي لنقل افكاره وللتعبير عن رغباته على مستوى معين ، في زمان ومكان معينين · وهذه القواعد اللغوية قد تقترب من قواعد لغات اخرى، وقد تبتعد قليلا أو كثيرا · وقربها من قواعد لغة الراغب في تعلمها يعينه على تبيّن جوانبها ، وبعدها عن قواعد لغته يقتضيه مزيدا من التبصر والمثابرة ·

ان للعربية قواعدها الخاصة في ايصال الافكار والافصاح عن مكنون النفوس ، وفي ابداع فنون الادب الراقي · وهذه القواعد تساير القواعد العامة لكل اللغات في هذا المضمار ، فهي قائمة على :

- علم الاصوات : لبيان الأصوات وتكوين المقاطع
- علم الصرف : لبيان بناء الكلمات المفردة
- علم النحو : لبيان طريقة اللغة في نظم الحمل
- علم الدلالة : لبيان المعاني المعجمية والسياقية في اللغة

وعلم الأصوات هو المدخل الطبيعي لدراسة اللغة ، والسير في طريق تعلمها سيرا منطقيا من البسيط الى المركب ، ليكون ذلك بطريقة تركيبية ملائمة للراشدين الذين تتطلب مداركهم الواعية نظرا في الخاص قبل العام ، ومعرفة بالجزئيات قبل الكليات في البناء اللغوى. ومكانة علم الأصوات هذه ، وتقدمه سائر العلوم اللغوية في الترتيب الزمني لدراسة اللغة ، مما جعلني أبادر الى النظر فيه ، ومما دفعني الى تقديم هذا البحث ، بعنوان :
" مشكلات تدريس الأصوات العربية للراشدين الاوّروبيّين "

وكان منهاجي في تناول الموضوع ، بعد التقديم له ، مهتمّا ببيان حوانبه الرئيسية ، فعنيت بقسمته من الداخل قسمة ثلاثية ، خصصت كل جانب منها بفصل يحدد ابعاده ، ويشكف عما يمكن أن أقول فيه ،

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* For the conference, a shortened version of this paper was translated into and presented in English.

فكانت المادة في :

- الفصل الاول : للنظر في العلم ، وهو مادة الأصوات العربية ،من اجل تحديدها ،وبيان الصعوبات الكامنة فيها . وهذا أمر ضروري لتيسيرها وتذليلها في رحى العملية التعليمية .

- الفصل الثاني : لتحديد المتعلم ، وهو لدينا من الراشدين الاوروبيين الراغبين في دراسة اللغة العربية . فالتعرف اليه لازم ، لأن معرفة المعلم بالمتعلم وبالعلم تعينه في السيطرة على العملية التعليميّة .
ان المتعلم قطب الرحى في عملنا ، وان نفعه غايتنا القصوى.

- الفصل الثالث : لتوصيف المعلم الكفّي القادر على العطاء والبذل ، والمساعدة على التحصيل اللغوى ، فهو الذى يدير الرحى بقدرته اللغوية وبما أوتي من طريقة فعالة ، ووسائل ناجحة في تذليل الصعوبات وحل المشكلات .

وانّني اذ أمضي في بحثي ، لأستعين بما واجهت في أثناء ادائي عملي من المواقف الكثيرة عند تعليم العربية للراشدين الأوروبيّين وغيرهم ، وبما أحسست عند اعداد المؤلفات لهم ، أو الاشراف على تنفيذ برامج لتعليمهم بشكل عامّ او خاص . كما استعنت بتحليل آرائهم القيمة التي أفرغتها في استبانات خاصّة نظمتها لهذا البحث ،فكانت عونا طيبّا لي في الكشف عن جوانب دقيقة .

وانّني لامل أن أوفق في الوصول الى نتائج نافعة ،والى تقديم توصيات ومقترحات مفيدة في هذا المجال .

- الفصل الاول :

الاصوات العربية: ان التعرف الى المادة التعليمية التي نقدمها الى طلابنا أمر ضرورى ، لذا كان لا بد من تحديد جوانب هذه المادة ،بتقديم وصف علمي دقيق لها ،وبتصنيف لمكوناتها يظهر حالها ويبرز ما قد يكمن فيها من الصعوبات .

(١ : ١) - الاصوات العربية :

الأصوات العربية الرئيسة أربعة وثلاثون صوتا ،منها ثمانية وعشرون صوتا من الصوامت ،وستّة أصوات من الصوائت . ومن هذه الأصوات تبنى المقاطع في اللغة العربية الفصحى المعاصرة . وهذا المستوى

اللغوى سوف يكون موضع نظرنا واهتمامنا ،في هذا البحث . وسنغض الطرف عن كل الانحرافات الصوتية التي قد تظهر في لهجة من لهجات العربية في عصر من العصور ، أو قطر من الاقطار .

وفي تناول هذه الأصوات سوف نبدأ بالصوامت ، تلك الأصوات اللغوية التي يصادف الهواء المنطلق من رئتي المتكلم عند النطق بها اعتراضا كليا أو جزئيا لمجراه في اتجاهه الى خارج الفم . فهذه الأصوات الصامتة مختلفة المخارج والصفات ، وهي مادة قائمة الحروف الهجائية فى العربية واللغات السامية . وقد اختلف ترتيبها فيها باختلاف الجهات والايام ، فهي تأتلف في المشرق العربي فى عصرنا هذا ، وفي صورها ،على النحو التالي :

أ ب ت ث ج ح خ د ذ ر ز س ش ص ض ط ظ ع غ ف ق ك ل م ن ه و ى .

وقد عمل بعض علماء العربية الاقدمين على ترتيب موادهم المعجمية وفق مخارج الحروف الصوامت . ويمكن الآن تصنيف هذه الصوامت وفق مخارجها ،من أدناها الى أقصاها ، أى من الشفتين الى الحنجرة . وفي ذلك تراعى صفات تلك الصوامت ، فهي شديدة ورخوة ، ومركبة ومتوسطة ، ثم هي محهورة ومهموسة ، ومفخمة ومرققة ،الى غير ذلك مما يحدّ الصامت ، ويبيّن مخرجه الدقيق ، وصفاته الخاصّة .

(١: ٢) ـ تصنيف الصوامت :

يمكن تصنيف الصوامت العربية فى الفصحى المعاصرة ،على النحو التالي :

(١) الباء : صامت شفوى بيني ، شديد مجهور مرقّق .
(٢) الميم : صامت شفوى بيني ، انفي متوسط ،مجهور مرقق .
(٣) الواو : صامت شفوى بيني ،ليّن متوسط ،مجهور مرقق .
ويعد من أقصى الحنك ، وهو شبه صائت .
(٤) الفاء : صامت شفوى سني ،رخو مهموس مرقّق .
(٥) الذال : صامت سني بيني ،رخو مجهور مرقق .
(٦) الظاء : صامت سنّي بيني ،رخو مجهور مفخم .
(٧) الثاء : صامت سنّي بيني ،رخو مهموس مرقق .
ونظيره المفخّم ليس من الأصوات العربية الرئيسية .
(٨) التاء : صامت سنّى لثوى ،شديد مهموس مرقق .
(٩) الطاء : صامت سنّ لثوى ،شديد مهموس مفخم .

(١٠) الدال : صامت سني لثوى ، شديد مجهور مرقّق .

(١١) الضاد : صامت سنّي لثوى ، شديد مجهور مفخم .

(١٢) الزاى : صامت لثوى خالص ، رخو مجهور مرقّق .
ونظيره المفخم ليس من الأصوات العربية الرئيسية .

(١٣) السين : صامت لثوى خالص ،رخو مهموس مرقّق.

(١٤) الصاد : صامت لثوى خالص ، رخو مهموس مفخم .

(١٥) الراء : صامت لثوى خالص ، متوسط مكرر ،مجهور مرقّق .

(١٦) اللام : صامت سنّي لثوى ،متوسط منحرف ، مجهور مرقّق .

(١٧) النون : صامت سني لثوى ،متوسط أنفي ، مجهور مرقق .

(١٨) الشين : صامت لثوى حنكي ، رخو مهموس مرقق .

(١٩) الجيم : صامت لثوى حنكي ، مركب ، مجهور مرقق .
والمركب هو الشديد الرخو ، والمركب يكون مرققا .

(٢٠) الياء : صامت حنكي ، لّين متوسط ، مجهور مرقّق .

(٢١) الكاف : صامت حنكي قصيّ ، شديد مهموس مرقّق .

(٢٢) القاف : صامت لهوى ، شديد مهموس مفخم .

(٢٣) الغين : صامت لهوى ،رخو مجهور مفخم .

(٢٤) الخاء : صامت لهوى ، رخو مهموس مفخم .

(٢٥) العين : صامت حلقي ، رخو مجهور مرقّق .

(٢٦) الحاء : صامت حلقي ، رخو مهموس مرقّق .

(٢٧) الهاء : صامت حنجرى ،رخو مهموس مرقّق .

(٢٨) الألف : صامت حنجرى ، شديد مرقّق ،ليس مجهورا وليس مهموسا.

(١ : ٣) تصنيف الصوائت

تقوم الصوائت في تكوينها على اللسان والشفتين ،فهي التي تغيّر شكل الممّر الهوائي عند النطق بها . وعند تصنيف الصوائت ، نوجّه اهتمامنا الى :

- الحزء الذى يرفع من اللسان أكثر من غيره عند تكوين الصائت ،فيكون الصائت أماميا أو مركزيا أو خلفيا ، اذا كان الحزء المرفوع هو مقدم اللسان أو مركزه أو نهايته ، على الترتيب .
- درجة علّو اللسان أو انخفاضه عند تكوين الصائت ، ممّا يؤدى الى ضيق الممّر الهوائى أو الى اتساعه ، فيكون الصائت ضيقاً أو متسعا تبعا لذلك .
- حال الشفتين عند تكوين الصائت : من حيث ضمهما أو انفراجهما او اتخاذهما وضعا محايدا ، فيكون الصائت مضموما أو منفرجا او محايدا.

- المدة الزمنية التي يستغرقها الصائت الى ان ينقضي ، لتكون فارقا بين الصوائت القصيرة والصوائت الطويلة .

وبناء على الأسس الأربعة المتقدمة ، تصنف الصوائت العربيّة الرئيسية الى :

(١) الفتحة العربية : صائت أمامي متسّع محايد قصير .
(٢) الفتحة الطويلة : صائت أمامي متسع محايد طويل .
(٣) الضمة العربية : صائت خلفي ضيّق مضموم قصير .
(٤) الضمة الطويلة : صائت خلفي ضيق مضموم طويل .
(٥) الكسرة العربية : صائت امامي ضيق منفرج قصير .
(٦) الكسرة الطويلة : صائت أمامي ضيق منفرج طويل .

واذا كانت كثرة الصوامت العربية تؤدى الى فارق بين صامتين لا يدركه سمع الدارس الأوروبيّ بسهولة ،فهو لا يراعيه عند النطق - فانّ قلة الصوائت العربيّة قد تجعل الدارس نفسه يستهين بتحويرها ،فينحو ببعضها نحو الأنماط المتعددة لصوائت لغته القومية .

(١ : ٤) - تصنيف المقاطع

ان انحراف الصوت العربيّ عن صورته الذهنية - لا يدرك الا بعد سماعه في مقاطع صوتيّة . وتكوين المقاطع العربية الرئيسة يكون على النحو التالي :

(١) مقطع بسيط قصير : صامت واحد ،يليه صائت قصير .
(٢) مقطع بسيط طويل : صامت واحد ،يليه صائت طويل .
(٣) مقطع مركّب قصير : صامتا ن ،بينهما صائت قصير .
(٤) مقطع مركّب طويل : صامتان ،بينهما صائت طويل .

فاتحاد الصوامت والصوائت لتكوين المقاطع والألفاظ ،قد يؤدى الى تغيير مدرك في الصورة الذهنيّة للصامت أو الصائت ، وهذه ضرورة يقتضيها المحيط الصوتي العامّ .

وابعد من ذلك ،ما قد يظهر في العربيّة من بعد عن تكديس الصوامت في بداية المقطع الصوتيّ ،وما يظهر فيها من كراهية المقطع المركب الطويل فى درج الكلام ، وما يؤدى اليه الاعراب من ربط أصوات الكلمة بأصوات التي تليها ، وما يقتضيه الوقف من اسقاط بعض الأصوات التي تظهر فى الوصل .

واتحاد الأصوات لتكوين الكلمات قد يؤدى الى شيء من ادغام الصامت في مثله أو مقاربه الذى يليه ، وهو أمر ضرورى توحيه طبيعة المتكلم وميله الى التخفيف ، فهو المسمى بالمماثلة في اللغة ،ونظيره ما يسمى بالمغايرة ، وانّ المغايرة لا تشكل عبئا على الدارس الذى لا يهمّه النظر في أصول اللغة .

من كل ما تقدم ،يظهر لنا أن الاصوات العربية ، قد يشكل بعضها "صعوبات" أمام الراشدين الأوروبيّين ، وتلك الصعوبات ناشئة عن غرابة هذه الأصوات ، وليس ما هو غريب بصعيب . واننا لنرتضي وصفها بالصعوبات، ونرفض تسميتها بالمشكلات ، فهذه هي اللغة ، وهذه هي طبيعة العربيّة . وليس غرضنا هنا أن ننظر في تغييرها لتلائم أصوات الراغبين في تعلمها- أيّا كانوا - فنظرتنا اليها نظرة وصفيّة فهي ثابتة ، يمكن لنا ان نتبينها وأن نعين المتعلّمين على الاتيان بها سليمة ، ويكون ذلك بفهم المتعلّمين أنفسهم وبتحديد مشكلاتهم والعمل على حلّها .

ونحن - المعلمين - علينا أن نقوم بواجبنا بقوة وأمانة ، وبمزيد من البذل والاهتمام .

وهذان الجانبان سيكونان موضع عناية هذا البحث في الفصلين الثاني والثالث من هذه الدراسة .

- الفصل الثاني:

الراشدون الأوروبيون : ان التعرف الى الدارسين لا يقل أهمية عن التعرف الى مادة الدرس ، واختلاف أعمارهم والسنتهم وثقافاتهم وقدراتهم وغاياتهم : يفرض اختلاف الطريقة التى يجب أن تتبع في تقديم الدروس اليهم .

(٢ : ١) - الراشدون الأوروبيّون

من الراشدين الاوروبيّين طلابنا الذين نحدّد حالاتهم، ونكشف مشكلاتهم ، وهم في الأغلب الأعمّ من المتكلّمين باللغات الهند أوروبية ، أو ممن هاجروا من أوروبا الى أقطار الدنيا الجديدة . ومن اولئك :

- نستثني المالطية ، هذه اللهجة العربيّة ، أو نجعل مالطا نفسها من جزر شمال افريقيا .
- ولا ننظر الى جيوب لغويّة ضيّقة الرقعة في بعض الأقطار الأوروبية .

- ونبعد اللغة التركيّة للصلات التي ربطت بينها وبين العربيّة ،ونستثني الراشدين الأتراك من مجموعات الدارسين ، ولو كانت تركيا كلها من القارة الأوروبية ، ونرى أن من المفروض أن يفرد بحث آخر للناطقين بها وبالفارسية والاوْرديّة وبعض اللغات الاسلاميّة في اسيا .

واذا ما كتبت عن هؤلاء الراشدين الأوروبيين من خلال اتصالي بهم ، فان أكثرهم كان من الناطقين بالانجليزيّة أو الروسيّة او الالمانيّة أو الاسبانيّة أو الفرنسيّة ،وقليل منهم كان من الاقطار الاسكندنافيّة أو سائر الأقطار الشرقية . كما أن أكثر طلابي من غير الانجليز كانوا يجيدون الانجليزية ، وليس العكس صحيحا . أما طلابي من الروس ، فقد كانت صلتهم بغير الروسية ضعيفة .

(٢:٢)- السهولة والصعوبة

ان أهميّة الجانب التطبيقيّ في نقل الأصوات بارزة من خلال الممارسات الفعليّة لتعليم هذه الفئات . ومن الواضح أن هناك أصواتا مشتركة بين قائمة الحروف الأبجديّة العربيّة وقوائم لغات أوروبا .

وفي هذا الصدد يمكن أن يقال :

- توصف الصوائت العربيّة كلها بالسهولة ، وهي ليست في الأبجدية العربية .
- من الصوامت العربيّة ما يسهل على كل الراشدين الأوروبيين تقريبا ، مثل :

الباء والدال والكاف واللام والميم والنون والسين والفاء والشين والتاء .

- ومن الصوامت العربيّة ما يسهل على أكثر الدارسين ،ويصعب على اقلهم ، مثل :

الالف والجيم والهاء والواو والزاى والياء والراء والثاء والذال.

فالالف تسهل منفصلة ، أو عند الابتداء بها وتعسر في التركيب اللفظي .

والجيم المعطشة قد تنحرف الى الياء ، وقد تنوب عنها الكاف المجهورة .

والهاء قد يوردها بعضهم ألفا ، فهي نظيرها المجهور.

والواو قد تسمع من بعضهم فاء مجهورة .

والياء قد تحوّل الى صوت الجيم .
والزاى قد تحول الى السين ، نظيرها المهموس .
والراء يصعب تكريرها ،فتلفظ غينا .
والثاء قد تبدل الى نظيرها الشديد، التاء ، أو الى السبن .
والذال تصعب على من تصعب عليهم الثاء، وقد تبدل الى الدال، نظيرها المحهور ، أو الى الزاى .

- ومن الصوامت العربيّة ما يصعب على أكثر الدارسين ، ويسهل على أقلهم، مثل :

الطاء والصاد والقاف والخاء والضاد والظاء والغين ،وهي أحرف الاستعلاء.

وقد تكون الخاء أو الغين من الأصوات المألوفة في لغات أوروبا الشرقية وفي ألمانيا أو في فرنسا، أما : الطاء والصاد والقاف والضاد والظاء ، هذه النظائر المطبقة للأحرف المنفتحة : التاء والسين والكاف والدال والذال ، فهي غريبة على راشدى شرقيّ أوروبا وغربيها.

- ويبقى بعد ذلك حرفان صامتان يعسران على كلّ الدارسين الأوروبيّين ،ولا يذلّلان الا بعد تدريب طويل وعناية فائقة ، وهما الصامتان الحلقيان :
  العين التي يبدل صوتها آلفا ، لأن مخرجي الصوتين متقاربان ،
  والحاء التي يبدل صوتها هاء أو خاء ، لأن المخارج متقاربة .

(٣:٢)- احوال الدارسين

قد تهون الدراسة في مجموعةعلى الصغار ،أما الراشدون الذين أصابوا نجاحا في الحياة ، فلا يسرهم أن يتعثروا في الاحاطة بحروف لغة يدرسونها . وقد وجدت الراشدين الأوروبيين مدركين لطبيعة الدراسة ، مقبلين على البداية بصبر ومشابرة .

وان التعحل من أحل بلوغ الغرض ليسبّب لهم ضيقا ، فبعضهم ينضم الى المجموعة وقد رغب في النزول الى الأسواق لقضاء الحاجات بالتخاطب مع الباعة والجماعات ، وبعضهن راغبات في التحدث الى الحارات العربيات وقضاء الزيارات العائليّة وما يتبعها من المجاملات والمسامرات ،وأساتذة الحامعات يريدون أن يفهموا طلأبهم ويفهموهم ، وآخرون وأخريات يرغبون في فهم ما يكتب في الصحف وما يسمع من المذياع أو ما يشاهد في التلفزيون . ويغيب عن أذهان عدد منهم أن تحقيق مثل هذه الأهداف يحتاج الى وتت كاف . واذا ما وجّه الى كثير منهم سؤال عن مقدار الوقت المخصص لدراسة العربية وتوظيفها ، ظهر أن الكثيرين يشكون من ضيق الوقت، وأن مخالطيهم من العرب ، يخاطبونهم بلغاتهم في أكثر الأحيان ، ولا يسمعونهم العربيّة الا قليلا .

ان هذه العقبات تؤثر في المستويات اللاحقة بوضوح ، لكنها لا تبرح خيال المتعلّم في فترة دراسة الأصوات ، أول عهده بدراسة اللغة العربية .

(٤:٢)- تنوع الدارسين

بعض الدارسين لا يقبلون على العربية بدافع ذاتي ، وهؤلاء هم أكثر الطلاب الذين تطلب منهم كلياتهم الجامعيّة أن يدرسوا اللغة بضع ساعات في الاسبوع ، فاللغة منهم متطلّب احباري يبغونه من أحل التخرّج فقط .

وأكثر الباقين يقبل على العربيّة اقبالا ذاتياً. وقد تحوى هذه الفئة عددا من الأشخاص الذين تتباين أغراضهم . والاتصال مطلب أساس لهم جميعا : ومن غير المتوقّع أن يسعى بعضهم الى بلوغ درجة الابداع الأدبي . وازاء مجالات الاستخدام اللغوى تتشعب أهواؤهم ،ثم ان المهارات اللغوية المستهدفة في هذه المحالات ،لن تقل لديهم عن مطلبي الفهم والافهام الشفويين ، وهما مطلبان عامّان لكلّ الدارسين ، وبعضهم لا تهمه مهارتا القراءة والكتابة .

والراغبون في دراسة العربيّة مختلفو المستويات التحصيليّة والثقافيّة ، فقد يأتي بعضهم وقد لقّن شيئا من مبادىء العربيّة بشكل سليم أو سقيم ، وخير من التحصيل السقيم عدمه ، لأن البدايات الموفقة أساس لاستمرار موفّق ، ومن العسير اصلاح الأسس المختلّة .

والأفراد في المحموعات قد تتباين قدراتهم على التحصيل اللغوى. فقد رأيت أساتذة اللغات وأساتذة العلوم الرياضية والحضارية أقدر على متابعة أسلوبي في تعليم الأصوات . وقد تواجه بعضهم مشكلات لا تواجه الآخرين .

(٥:٢)- مشكلات عضوية

هذه المشكلات يصادفها الراشدون فيتعلّم الاصوات ، ولا يكاد أطفالهم يحسون بشيء منها . فأعضاء النطق عند الكبار قد ألفت اصدار أصوات لغاتها ، فاستقرت على ذلك ، فأصبح لا بدّ من التدريب الواعي على الصوت الجديد ،وصار التنبّه الى الفارق بين الصوتين المتقاربين ضروريا عند السمع والنطق .

وادراك هذه الفوارق يحتاج الى حواسّ سليمة من اجل تمييزها قبل العمل على الاتيان بها ، وانّ حاستّي السمع والبصر عند الكبار ليستا في أقصى درجات السلامة . فأحد طلابي مهندس تحاوز الستين من عمره ،في أذنيه صمم يقتضي أن أرفع صوتي فوق المعتاد ليسمع شيئا ممّا أقول .

وكان ارتفاع صوتي يسبّب الضيق لسليمي السمع . وقد كنت أنا نفسي في تحصيلي المتأخّر لاحدى اللغات - أضيق بطول نظرى، فتراني أضع النظارة لأقرأ من كتاب ، وأرفعها لأقرأمن على السبورة ، وكانت هذه العملية تتكرر مرات ومرات في ساعة .

(٦:٢)- أبعاد حضاريّة

اذا كان التعجّل من العقبات النفسيّة التي تسيء الى سير الدرس ، فان هناك عقبات حضاريّة يضيق بها الدارس على نفسه في هذه المرحلة .

فالكتابة العربية - والكتابة تصوير للغة وليست لغة - ليست مما ألف الراشدون في الرسم اللاتيني أو اليوناني . لذا فان من الغريب أن ترسم الألفاظ من اليمين الى اليسار ،وأن تقرأ هذه الألفاظ كذلك . ثم ان الدارس الأوروبي قد ألف رسم الصوامت كلها في الكلمة ، وهو في العربية يفكر في مأزق قد يصير اليه باسقاط الحركات القصيرة من الكتابة . وهو في الممارسات القرائيّة يحد أحرفا ثلاثة من الصوامت قد استعيرت صورها لتكتب بها الصوائت الطويلة .

هذه الكتابة التي قد يصفها العربي متجنيا لأخيه العربي بالصعوبة ، قد يصفها العربيّ او الاوروبي لاخيه الأوروبي بالصعوبة كذلك . واذا كانت الكتابة عقبة مبكرة في طريق الدارسين ، فان الترادف في العربية من الظلال الكثيفة التي تهيمن على أذهان بعضهم قبل الوصول اليها . فترى العربي يحمّل الأوروبي في ذهنه هذه النظرة الخاطئة الى العربية ، ثم يتبعها وصفها بالصعوبة لكثرة المترادفات ، وهي من ذلك براء . اننا نسمعهم في مرحلة التعريف بالعربية يرهب بعضهم بعضا بمئات الأسماء المترادفة للأسد والجمل والسيف والخمر .لقد خلت بلاد العرب من الأسود ، وتناقصت فيها أعداد الابل ، فصار الجمل حبيس حديقة الحيوان في بعض أقطارها ، وحفظ السيف في غمده في المتحف ، وحرمت الخمر عليهم ، ولم يعودوا في حاجة الى تلك المترادفات من الألفاظ المستعملة لمسميات مهملة .

وللغة العربية بالاسلام ارتباط وثيق ، ومعرفة أكثر الراغبين في دراستها بهذا الدين محدودة . وان جهل دارس العربية بالاسلام قد يكون ذا أثر ايجابي يدفعه للكشف عن هذا المجهول الذى لا يكاد يعرف عنه شيئا .

وهكذا تتجمع في اذهان الراشدين الاوروبين تصورات شتى لجوانب

مختلفة من الحياة تتضمنها اللغة . ومن المهمّ أن لا يتعجّل هؤلاء كثيرا في فهم هذه الجوانب من خلال دروس الأصوات الأولية . فقد وقع كثير ممن نالوا حظا وافرا من العربية في أخطاء نتيجة للخلط بين الأصوات التي تولّد فوارق في الأبنية والمعاني .

هذه نقاط أراها تستحقّ العناية والاهتمام عند النظر في أحوال المتعلمين . وان على المعلم أن يتحرى نقاطا أخرى من خلال ممارساته التطبيقية ، وهو لا شك قادر على الكشف عن جوانب أخرى اذا ما كانت له قدرة في المادة والطريقة ،ورغبة صادقة في العمل واقبال عليه . ومن واجبه أن يعي صعوبات اللغة العربية على غير الناطقين بها ، وعليه ان ينظر في مشكلات طلابه والعقبات المختلفة التي قد تعترض سبيلهم ، وان يعينهم على العبور الى أهدافهم اللاحقة في أبنية الألفاظ وتراكيب الجمل والدلالات المعجميّة والسياقيّة .

ـ الفصل الثالث :

معلم الأصوات العربية : اما معلم اللغة العربية ، فهو الذى يعلم الطلاب في أكثر الأحيان أصواتها ،يخرجها من مخارج سليمة فتطرق آذانهم باظهار الفارق بين كل صوتين متشابهين ، ويعمل على اقدارهم على اداء الصوت العربي الخالص ، كما يعني بالمباعدة بين العربي وما يشبهه من أصواتهم اللغوية . ومن النادر أن يخصص معلم للأصوات ينتهي دوره بعد الفراغ من التدريب الكافي على هذا الفرع من اللغة . وقد يكون من النافع عند وجود أعداد كبيرة من الطلاب ، تدريب معلم على أداء مثل هذه المهمة . ويجب أن تكتمل في مدرس هذه الأصوات شرائط معينة ، فلننظر فيها .

(١:٣ ـ مواصفات خاصة)

اذا ما توفرت في معلم الأصوات كل الصفات الطيبة التي يجب أن يتحلى بها المعلم بشكل عام ، من الخلق العظيم ، والثقافة الأصيلة ، والاحساس بالرضا ، والاقبال على العمل ، والقدرة على الابتكار في طرق تنفيذه ـ كان من اللازم أن تتوافر فيه شرائط لا بد منها لاتقان عمله :

- من ذلك أن اعضاء النطق عنده يجب أن تكون سليمة ، من رئتيه الى شفتيه ، لان اى عجز عضوى في الانف أو الأسنان أو غيرها ، يخل بسلامة مخرج الصوت، وهذا الاخلال من شأنه أن يولد ارباكا شديدا في أذني الطالب ، وفي سلامة تقليده للصوت المطلوب .

- كما أن على معلم الأصوات أن يهحر أصوات لهحته في أثناء أداء عمله في تعليم الأصوات الفصيحة ، وأن يتنبه الى أن معيار السلامة هو الذى يحب أن يتبع في الأصوات المعيارية ، في لغة معيارية ، ومقياس السلامة في ذلك هو أصوات قارىء القران • أما ما نسمع من اضطرابات في أصوات المعلمين من ضادات أو جيمات أو قافات أو سواها ، فانما هو صورة سيئة لبدايات غير موفقة لمعلمين لم يقصوا أصوات لهجاتهم عن محال الدرس •

- وعلى المعلم أيضا أن يحسن الربط والموازنة بين أصوات العربية واصوات لغات الطلاب ، من غير أن يؤدى ذلك الى تفضيل بعض على بعض • فالمهم هنا أن يتنبه هو الى صعوبات عامة تواجه الراشدين الأوروبيين من كل القارة ، والى صعوبات خاصة تواحه الراشدين من أبناء لغة معينة •

- ومعلم الأصوات يجب أن يكون ذا دراية بجوانب هذا الفرع من علوم اللغة ، ملما بأقسامه وغاياته الماما كافيا ، يوليه اهتماما يليق بأوليته ، ويعنى به عناية لا يلقاها عند معلم العربية للطلاب العرب • ومع علم الأصوات يحب على المعلم أن يلم بسائر أفرع العربيّة في الصرف والنحو والدلالات ، وأن يكون حريصا على التفرية بين اهتماماتها ، عاملا على التوحيد بين غاياتها ، وأن ينظر اليها نظرة حديثة وفق الدراسات اللغوية المعاصرة •

(٢:٣ ـ الطريقة التركيبية)

ان تعليم الراشدين اللغات يتطلب طريقة تختلف عن تلك المتبعة في تعليم غيرهم • ففي تعليم الصغار أثبتت الطريقة التحليلية نحاحا ، ونحن باستعمالها نصل الى الصوت بعد تجريده من كلمات شتى حملت المعاني الى أذهان المتعلمين • أما في تعليم الكبار فانني أفضل استخدام الطريقة التركيبية التي تبدأ بالأصوات في المقاطع ، منطلقة الى الألفاظ ، فالتراكيب البسيطة فالمعقدة • وهذا المسار التصاعدى مقبول لديّ لقدرة الراشدين على التركيب ، ولتمكّنهم من التجريد ، أما عقول الصغار فتتناول الأشياء تناولا كليا ،لتسير بعد ذلك في طريق التجزئة •

وهذه الطريقة لا تعني بحال من الأحوال أننا نبعد العربية عن مجال توظيفها ، بل ان التوظيف أمر مطلوب في اللحظة الأولى من الدراسة • فالعبارة الاوّلى التي تطرق أسماء طلابي مني ، هي عبارة : السلام عليكم •

وقد يبدو غريبا أن يجهل الطلاب جميعا معنى هذه العبارة . ولا يعني توظيفي لها أن تحليلها وأن كتابتها وقراءتها من الأمور ذات الاهتمام المبكر .

(٣ : ٣ ـ الوحدة المقطعية)

ان الدعوة الى الابتداء بالبسيط قبل المركب لا تعني أن نحاول تجريد الصامت من الصائت ، اذ لا بد من تآلفهما من أجل الوصول الى المقطع الصوتي . فالصامت كما قدمنا صورة ذهنية ، والصائت كذلك ، ولا وجود لأيّ منهما منفصلا عن الآخر . ومن هنا كانت المقاطع أجزاء الألفاظ ، وكان المقطع البسيط المفتوح المؤلف من صامت يعقبه صائت قصير ـ أول ما نقدّم الى المتعلمين للتفريق بين الصوامت .

واذا كان المقطع البسيط المفتوح منطلقنا الى درس الأصوات ، فعلينا أن نتخير الصوامت التي نبدأ بها في درسنا الأول . ويجب أن تكون هذه منتقاة مما لا يصعب على الدارسين ، أو يتعذر نطقه عليهم . والمجموعة التي نبدأ بها يمكن أن تكون : بَ، دَ، كَ، لَ، مَ، نَ، سَ، فَ، شَ، تَ .

هذه المقاطع العشرة سهلة ، وأسهلها المقاطع الأربعة : كَ، لَ، مَ، نَ ، وانها لتستهوى الطالب لأنها من أصوات لغته ، ولأن ترتيبها في أبجديته يوافق ترتيب الأصوات العربية الأبجدية والهجائية .

ولن يطول بنا الوقت في الصوامت العشرة الأولى مع الفتحة ، ويجمل بنا أن نحركها بالفتحة أولا ، لننتقل اليها نفسها بالضمة والكسرة . ثم نمضي بعدها الى تسعة مقاطع جديدة ، نكونها من صوامت تخلو منها بعض لغات أوروبا ، نحركها بالفتحة والضمة والكسرة ، ونضيفها الى الصوامت العشرة السابقة لنكون منها مقاطع بسيطة قصيرة . ومن المفضل قبيل الانتهاء منها تكوين مقاطع بسيطة طويلة باستعمال الفتحة والضمة والكسرة الطوال لهذا الغرض . وهذه الصوامت هي : و، ذ، ث، ز، ر، ح، ي، ه، أ .

وعند تناول أحرف الاستعلاء السبعة : خ ص ض ط ظ غ ق ، يكون الطلاب قد سيطروا على تسعة عشر صامتا في نمطين من المقاطع العربية الأربعة . وان يتطلب التدرب على نطق هذه الصوامت السبعة شيئا من الصبر والأناة لدى كثير من الطلاب ، فان بعضهم قادر على الاتيان بعدد منها في وقت مبكر . أما في هذه الفترة ، فلا بد من الاطالة من أجل مزيد من التدريب ،

ومن احل تقديم ستة وعشرين صامتا في المقاطع العربية الأربعة الرئيسة .

بعد ذلك نأتي الى الحاء والعين ، فنخصص فترة كافية لدراستهما ولتثبيت الأصوات العربية كلها ، من صوامت وصوائت ، في مختلف أنواع المقاطع .

وإنْ نطالب المتعلمين بالبعد عن التعجل ، فان علينا أن نطالب المعلمين بالبعد عنه في بدايات الأصوات ، فالتحلي بالصبر في هذه المرحلة مطلوب من الطرفيين . فقد يتعثر الدارسون ويتعذر عليهم الاتيان بالأصوات السليمة ، وهذا لا يعني اليأس من قدرتهم على ذلك في وقت لاحق ، لأن المحاولات المتصلة تجدى في هذا المحال . وليس من الغريب أن نترك الحاء والعين لدى بعضهم من غير اتقان كامل في دروس المقاطع ، ولكن المستهجن أن نترك العناية بهما أو بغيرهما لديهم في دروس أبنية الألفاظ وتركيب الحمل .

(٤:٣ – تركيب الألفاظ)

في ختام مرحلة تثبيت الأصوات العربية لا بد من العمل على نطق ألفاظ مفردة متعددة ، يستحسن أن تكون ذات معنى مادى محسوس بعيد عن التجريد ، وللاقلال من الترجمات واللجوء الى استعمال اللغات الأخرى ، يفضل استعمال الموجودات في حجرة الدراسة . وان رأينا أن نفيد مما ليس قريبا منا ،فان من الأفضل استخدام اللوحات المصورة ، وذلك كله من أحل بث شيء من الحياة في درس الأصوات المجردة . ونحن في هذه المرحلة . وللغرض نفسه ، لا نغفل توظيف عبارات التحية والأسئلة القصيرة التي يكثر دورها على الألسنة في المواقف اليومية المختلفة .

ولراحة طلابنا الذين نعد لهم برنامحا خاصا من عندنا لدراسة العربية السليمة ، علينا أن نهيء الأجواء النفسية الصافية ، وان نعمل على خلق روح الائتلاف بين المعلم وطلابه ،بابعاد ما قد ينطوى لديهم على شيء من الغرابة .

(٥:٣ – اللغة الأدبية)

علينا أن نوجه عناية طلابنا الى الانحراف الذى قد يمس بعض الأصوات العربية في الاستعمال السوقيّ. وعندما نلفت أنظارهم الى شيء من ذلك الانحراف ، نبين باستمرار مدى اهتمامنا بالسلامة ، ونظهر اصرارنا على البعد عن تلك الانحرافات في الأصوات وفي غيرها ، لأننا بتدريس اللغة الادبية انما نخدم الطلاب باقدارهم على مستوى لغوى عال يسود الأقطار

العربية كلها ، وبذلك نأخذ بأيديهم الى ذروة اللغة السليمة .

وطلابي الذين أبدوا رغبة في دراسة اللهجة ، وجدوا راحة نفسية عجيبة عندما مثلت لهم اللغة الراقية بقمة الجبل ، ومثلت لهم اللهجات بسفوحه المتعددة المنخفضة ،ثم بينت لهم أننا نسعى الى الوصول بهم الى القمة ، لأنهم يستطيعون بعد ذلك الهبوط الى الأدنى اذا شاءوا . وان عنايتنا بلهجة من اللهجات دون سواها ، تجعل الوصول الى القمة عسيرا . أضف الى هذا ، أن اللغة الأدبية لغة معيارية مقروءة ومكتوبة ، ذات تراث عريق ، كما أنها اللغة الرسمية لجل البلاد العربيّة في ميادين العلم والأدب ،وفي دواوين الحكومات وميادين الاعلام ، أما اللهجة لدينا ، فليست أكثر من نظام صوتي منحرف لمجموعة محدودة من الناس في فترة زمنية قصيرة ، وليس تدريسها غرضا من أغراضنا . فاذا ما أصبحت لهجة معيّنة هدفا مقصودا لسبب أو لاخر ، فان الأمر يستدعي برنامجا خاصا ورؤيا مغايرة .

(٦:٣ ـ الكتابة العربية)

يذلل المعلم القدير ما قد يعترض سبيل طلابه من صعوبات ، وبثقافته الواسعة يواجه المواقف المختلفة مواجهة علمية ثابتة . وعند اللجوء الى مهارة الكتابة ، لا بد من ادراك المخاوف التي قد تنتاب الطالب بتحوله من اليسار الى اليمين .

ومن المفيد في المرحلة الأولى أن يقرن المعلم الحرف العربي بالنظير اللاتيني . وقد رأيت في عملي أن يكون الأساس في ذلك ثابتا ما أمكن . وقد استخدمت لذلك الأشكال اللاتينية مميزا بين صوت وما يقاربه باضافة شرطة أو نقطة تحت الشكل أو فوقه ، لتكون فيه ضوابط مقاربة في شكلها للنقط العربي ، فالشرطة (ـ) تحت الحرف قد تعني احتكاكه ورخاوته ، وهي فوق الصائت في النظير اللاتيني اطالته ومضاعفة زمنه . كما استعملت النقطة (.) ،لبيان استعلاء الصامت العربي . ثم رأيت استخدام الشدة العربية (ّ) ،لبيان الادغام ومضاعفة الصامت ، مفضلا ذلك على تكرير صورة الصوت . ويقل استخدام النظير اللاتيني بعد التثبيت من قراءة الكتابات العربية ، لتتاح للطالب فرصة التدريب والإلف التام .

(٣: ٧ ـ العروبة والاسلام)

معلم العربية ـ ان يكن عربيا حقا ومسلما صدقا ـ عليه في دروسه الأولى ، والدروس التي تليها ، أن يتحلى بما يوافق عروبته واسلامه من

معاملة طيبة وخلق عظيم ، وأن تتجلى فيه الصفات الانسانية الحميدة . فهذه الخصال تجذب اليه طلابه ، وتزيل آى حاجز نفسي يقوم بينه وبينهم .

وان معلم الأصوات الناجح ، مطالب بأن يعي العلم الذى يقدمه وعيا تاما ، ومطالب كذلك بفهم حال طلابه من الراشدين الأوروبيين ، وهو مطالب بعد ذلك كله باستعمال أفضل الطرق في تدريس هذا الفرع الرئيس المقدم من دروس اللغة العربية .

في ختام هذا البحث ، يسرني أن أقدم ، بتواضع جم ، بعض توصيات ومقترحات قد تكون نافعة في مجال تدريس الأصوات العربية بشكل خاص ، وقد تكون مفيده في تدريس اللغة العربية بشكل عام .

فمن هذه التوصيات والمقترحات :

(١) الأصوات العربية السليمة ، من صوامت وصوائت وما ائتلف منها - هي موضوع دراستنا ، لأن اللغة الأدبية هي هدفنا . وليس من السهل ان نتناول هنا كل الانحرافات الصوتية في لهجات اللغة ، قديمها وحديثها .

(٢) الصوامت العربية أربعة أضرب :

- ضرب يسهل على كل الراشدين الأوروبيين .
- وضرب يسهل على أكثرهم ، ويصعب على أقلهم .
- وضرب يصعب على أكثرهم ، ويسهل على أقلهم .
- وضرب يصعب عليهم جميعا .

اما الصوائت العربية فتسهل عليهم جميعا .

ولا بد من السير في تدريس الأصوات العربية من السهل الى الصعب سيرا ثابت الخطوة واضح المنهاج ، بحيث يستمر التدريب في هذه المرحلة بتبديل الصائت الذى يلي مجموعة من الصوامت لتوليد المقاطع العربية المختلفة .

(٣) الراشدون الأوروبيون أو المهاجرون ، قد تختلف أعمارهم وألسنتهم وثقافاتهم وقدراتهم وغاياتهم ، وتبعا لذلك تختلف طريقة تقديم المادة اللغوية اليهم ، ويختلف مقدار تحصيلهم ومدى اتقانهم .

ان يوجد أكبر قدر ممكن من التجانس بين أفراد المجموعة الواحدة ،

لان هذا التجانس يوحد الطريقة ، ويقلل الجهود التى تضيع في التشتت بين فئة وأخرى .

(٤) ان التعجل الذى قد يتسم به بعض الدارسبن أو بعض المدرسين ، يؤدى في النهاية الى عدم الاتقان ، ويسبب تعثرا في المراحل التالية . لذا كان التريث واجبا في مواقف تقتضي شيئا من التأني والتأكيد .

(٥) للدارسين من الراشدين الأوروبيين مشكلات عضوية ونفسية شتى ، وقد يصعب على بعضهم النطق ببعض الصوامت العربية ، ويصعب مثل هذا على الراشدين من العرب أنفسهم ، اذا لم تستقم مخارج حروفهم في الصغر . وربما وجد بعض الأوروبيين جديدا غريبا في حضارة العرب ولغتهم وكتابة هذه اللغة ، لكن المعلم الواعي يبدد الدهشة من الجديد والغريب ، ويزيل الحواجز .

(٦) أعضاء النطق لدى معلم الأصوات يجب أن تكون سليمة ، وأصواته يجب أن تكون مستقيمة بعيدة عن انحرافات اللهجات . وعليه أن يسلح نفسه بثقافة لغوية عربية واسعة ، وأن يطلع اطلاعا كافيا على لغات طلابه وثقافاتهم .

(٧) أنصح بالطريقة التركيبية في تعليم الراشدين الأوروبيين وغيرهم ، وهذا يجعل دروس الأصوات في البداية ، ومع هذه الدروس يحسن توظيف العبارات التى يكثر دورانها على الألسنة في الحياة العامة .

(٨) المعلمون الذين يكلفون تدريس العربية لغير الناطقين بها - يفضل أن ينالوا تدريبا كافيا يؤهلهم لهذا العمل المتخصص ، وفي برنامج يوضع بدقة ، وينفذ باهتمام .

(٩) يحسن أن يقضي الراغبون في دراسة العربية من الراشدين الأوروبيين فترة زمنية مناسبة في مجالات لغوية ذات مستوى مرضي في بلاد العرب ، لتتاح لهم ممارسة فعلية لما يتلقونه في قاعات الدراسة ، فتصفى أصواتهم مما قد يشوبها من الانحرافات ، وأظن فصل الصيف موعدا مناسبا للطلاب الجامعيين ولغيرهم للوفاء بهذا الغرض .

(١٠) يستعين المعلمون بوسائل توضيحية مختلفة لتقريب المادة الى الطلاب ، وهذه الوسائل قد تكون من الكتب أو المطبوعات أو من الجداريات الخطية أو التصويرية ، أو من التسجيلات المرئية

او المسموعة . وان تبادل الخبرات في هذا المجال يزيد النفع ويوفر الجهود .

TABI (١) (١) الجـــدول

ARABIC CONSONANT PHONEMES الصـــوامت العربيـــة

	Bilabial شفـــوى	Labiodental شفوى سنى	Plain Interdental بينى	Emphatic Interdental بيني مطبق	PlainDental سنى	Emphatic Dental Alveolar بيني مطبق	Alveopalatal لثوى	Palatal	Velar حنكي	Uvular لهوى	Pharyngeal حلقــي	Glottal حنجرى
Vl. مهموس Stops انفجاري					t ت	ṭ ط			k ك	ḳ ق		? أ
Vd. مجهور	b ب				d د	ḍ ض						
Vl. مهموس احتكاكي Fricatives		f ف	ṯ ث		s س	ṣ ص	ś ش			ẖ خ	ḥ ح	h ه
Vd. مجهور			ḏ د	ḏ̣ ظ	z ز					g̣ غ	ع ع	
مركب Affricates Vd. مجهور							ǵ ج					
Nasals انفي	m م					n ن						
Lateral جانبي						l ل						
Trills مكرر						r ر						
شبه صـائـت Semivowels	w و							y ي				

TABLE (2) الجدول (٢) *

ARABIC VOWELS الصوائت العربية

	Front أمامي		Central اوسط		Back خلفي	
	Long ط	Short ق	long ط	Short ق	long ط	short ق
High	ī ي	i ـِ			ū و	u ـُ
Low			ā ا	a ـَ		

TABLE (3) الجدول (٣)

ARABIC SYLLABLES * المقاطع العربية *

	Short قصير	Long طويل
Simple بسيط	CV ص صق	CV̄ ص صط
Composed مركب	CVC ص صق ص	CV̄C ص صط ص

* C = Consonant

V = Vowel

V̄ = Long Vowel

* ق : قصير

ط : طويل

ص : صامت

صق: صائت قصير

صط : صائت طويل

SEX DIFFERENTIATION AND LINGUISTIC VARIATIONS
A CASE STUDY: SPOKEN ARABIC IN AMMAN

Hassan Abdel-Jawad

A considerable number of sociolinguistic studies of Western speech communities have begun to present accurate, structured data illustrating the form that sex differentiation takes in the linguistic communities. The bulk of these studies have been interested in two major issues: Do women and men speak differently and what are the societal and cultural implications of these differences? These studies have revealed the general observation that sexual differentiation plays a major role in linguistic behavior (Fischer 1958; Labov 1966, 1972, 1979; Wolfram 1969; Fasold 1972; Trudgill 1975, to mention only these), and that, as Trudgill 1975 puts it:

> "...women, allowing for other variables, such as age, education and social class, consistently produce Linguistic forms which more closely approach those of the standard language or have higher prestige than those produced by men, or, alternatively, that they produce forms of this type more frequently than men." (p. 89)

Furthermore, Labov (1979) distinguished two distinctive patterns of this sexual differentiation when he stated that, "women are most often in the lead in changes in progress, but are more conservative for the stable sociolinguistic variables that may have acquired negative prestige." (p. 12)

In the first pattern, women are portrayed as leaders or initiators of linguistic changes. Gauchat and other French linguists discovered as early as the beginning of this century a number of sound changes in progress and found that women used more of the newer linguistic forms than men (Labov 1972:301-304). Recent studies seem to confirm this observation. (Labov 1966) found that women are almost a generation ahead of men in the raising of (eh) in New York City. This was also confirmed by Labov, Yaeger and Steiner 1972, and by studies of other cities such as Chicago and Detroit.

However, as Labov cautioned, "it would be a serious error to construct a general principle that women always lead...in linguistic change." (1972:303). Some cases can be cited where men lead in linguistic change or in the use of new vernacular forms in casual speech (Labov's Study of Martha's Vineyard Island).

The second and more relevant pattern to the present paper is the general finding that with respect to stable variables, women use fewer stigmatized forms and are more sensitive than men to the prestige pattern which very often corresponds to the standard forms. Women seem to be, contrary to the first pattern above, linguistically more conservative as they produce such prestigious standard forms more often than men. Labov 1972 and again 1979 stated that women use fewer stigmatized linguistic variants in careful speech, and are more sensitive than men to prestige patterns and to overt sociolinguistic values.

In an informative review of empirical studies Vaughn-Cooke (n.d) examined data on phonological and grammatical variables provided by a number of major empirical studies and found out that:

> "Analysis of 9 phonological features and 10 grammatical features have shown that women in 24 of 32 cases used the standard variant more often than men. For the other 8 cases, females used standard variants as often or nearly as often as males." (pp. 42-43).

It is widely accepted that this normative behavior of women in Western communities is related to women's greater consciousness of social status and awareness of the prestige associated with certain forms of speech (Labov 1972; Romaine 1978; Trudgill 1975). Trudgill gave two possible reasons to explain this awareness: first, women feel that they are socially insecure and therefore they use language sometimes to secure and signal their social status, and secondly, men can be rated socially by what they do but women may be rated on how they appear (1975:91-92). Labov further argues "the sexual differentiation of speakers is therefore not a product of physical factors alone (i.e. vocal-cord difference)...but rather an expressive pasture which is socially more appropriate for one sex or the other." (1972:304).

In this paper I propose to examine present empirical data to: first, lend support to the claim that sex differentiation plays a major role in linguistic behavior, and, secondly, to show that the claim that females are generally more conservative with respect to the use of the standard forms holds true in the Western communities but not in the Arab (Middle Eastern) communities. In other words, women use the standard prestigious forms in both careful and casual styles less often than men. It is true, however, that women may lead in producing some local socially prestigious linguistic features.

The results cited in this paper are based on a sociolinguistic study of the city of Amman carried out in the winter of 1980 with a sufficiently large and heterogeneous random sample, 150 in number, of the population of the city, and reported in detail in Abdel-Jawad 1981. A systematic quantitative analysis of the data is the basis for the study of variation in which the main concern was to find the correlation between the linguistic variables and both the sociostylistic and linguistic constraints.

In Section 1 I shall examine the lexical variation demonstrating the correlation between lexical choice and the sex of the speaker. Section 2 will examine the phonological variable (Q) standardization and how the choice of one variant rather than the other is conditioned also by the sex of the speaker. Section 3 will contain comments and conclusions.

I. Sex Differentiation and Lexical Choice

The lexicon in Arabic is the area with the greatest amount of variation and in which the departures from the plain colloquials are the most numerous (Blanc 1960). Acknowledging a number of persistent problems in dealing with lexical variation, I decided to classify the lexicon of spoken Arabic in Amman (henceforth SAA) into 4 categories, benefitting from Altoma (1969). The first two categories, I and II, (words which are pure or plain standard and words which are cognate and identical in phonemic shape with the standard items) are the closest to the standard variety, while categories III and IV (i.e. words which are cognate with the standard but not identical and pure colloquial words--non-cognate, non-identical) are removed from the standard (for more details see Abdel-Jawad 1981).

The results of my analysis indicate that women seem to use lexical items which belong to categories III and IV, the least standard, more often than men. On the other hand, men tend to use items from categories I and II, the most standard, more often than women do. In other words, men use the standard words more often than women. Tables 1 and 2 below show the distribution of the lexical items by sex and education respectively.

TABLE 1

DISTRIBUTION OF THE LEXICAL ITEMS BY SEX

Sex	Standard I	Cognate Identical II	Cognate Non-iden. III	Colloquial (IV)	N
Female	6%	33%	42%	19%	3653
Male	14%	41%	34%	11%	8682

TABLE 2

DISTRIBUTION OF THE LEXICAL ITEMS BY SEX AND EDUCATION

Ed	Sex	Cat. I	Cat. II	Cat. III	Cat. IV	N
College	F	12%	38%	43%	8%	1429
	M	23%	44%	26%	7%	4015
H. School	F	4%	35%	44%	17%	975
	M	9%	41%	40%	10%	3323
Uned.	F	1%	25%	42%	33%	1248
	M	2%	31%	45%	22%	1344

It is clear from these two tables that men, in general, use standard items more often than women and that if other social factors such as education are considered, the same pattern of differentiation is repeated. Notice further that the differences in usage between males and females are much greater among the highly educated speakers than the less educated speakers.

2. Sex Differentiation and the Choice of (Q) Variants

The reflexes of the standard Arabic uvular voiceless /q/ show considerable variation in the colloquial varieties over time and space. The four major variants used in Jordan are (q~?~g~k), so, for example, a word like qalb "heart" can be heard as: (qalb ~ ?alb ~ galb ~ kalb).

Because of the social and geographical importance of this variable as a carrier of local or regional loyalties, it has often been used by dialectologists as the main criterion for establishing the dialect boundaries or isoglosses in the Arabic dialects (i.e. G-dialects, k-dialects, and ?-dialects).

Today, in communities like Amman, many speakers use more than one of the variants of (Q). Each of these forms has a set of social values associated with it, and therefore the occurrence of any one form tells us something about the speaker and his background as well as the situation of the speech act. The shift from one variant to the other can be described as patterned and functional rather than random.

The results of the VARBRUL analysis of (Q) standardization (i.e. the alteration between the local variants and the standard one), show very clearly the powerful effect of sex on the choice of one (Q) variant or another. In general, men are shown to favor the application of the (Q) standardization rule (i.e. changing the local variant into the standard one) with a probability of (.66) while women seem to disfavor the application of the rule with (.34) probability. This pattern again repeats itself at all levels of style, education, background and age. Tables 3 - 6 below demonstrate this pattern.

TABLE 3

DISTRIBUTION OF (Q) STANDARDIZATION BY SEX AND STYLE

	Style		
Sex	Formal	Informal	Casual
F	47%	30%	16%
M	74%	50%	27%

TABLE 4

PROBABILITY CONTRIBUTION AND DISTRIBUTION OF SEX FACTOR IN THE THREE DIALECTAL GROUPS

Sex	?-dialect urban	G-dialect Bedouin	k-dialect fellaḥiin
F	.33	.46	.42
M	.67	.54	.58

TABLE 5

DISTRIBUTION OF (Q) STANDARDIZATION BY SEX AND EDUCATION

Sex	College	H. School	Uned.
F	36%	28%	12%
M	71%	42%	18%

TABLE 6

DISTRIBUTION OF (Q) STANDARDIZATION BY SEX AND AGE

Sex	Young 18-29	Middle 30-44	Old 45+
F	33%	31%	12%
M	43%	66%	43%

Generally speaking, these tables show that there is a significant difference in the usage of the standard variant (q) between men and women. Men seem to use the standard (q) more often than women. Similar results were also reported in Schmidt 1974 in his study of Cairene Arabic.

The distinction is an important one, yet it may be argued that "the observed covariation may be the result of a coincidental correlation of sex with another social division (e.g. education) which has stronger implications for speech than sex." (Smith 1979:115). Fortunately, the VARBRUL analysis is able to predict the independent weight of each internal and/or external factor (Cf. the results in Table 4 above). Furthermore, I investigated the distribution of (Q) standardization in terms of more than one factor. One way of doing this is to investigate the interrelationship among the different factors and to study their influence on the choice of the various variants. Table 7 below illustrates the contribution of sex, education and style to (Q) standardization.

TABLE 7

DISTRIBUTION OF (Q) STANDARDIZATION BY SEX, EDUCATION AND STYLE

STYLE:	Formal		Informal		Casual	
Ed.	F	M	F	M	F	M
College	51%	84%	31%	60%	23%	39%
H. School	43%	60%	32%	40%	19%	26%
Uned.	20%	-	14%	20%	11%	17%

(- indicates an empty cell--no tokens)

This table demonstrates a regular and systematic pattern of sex differentiation. At every level, men are more users of the standard variant than women.

Another way of solving the problem of the incidental relation, overlapping, interaction or arbitrariness, is to control all the other social variables and try to keep them constant and comparable. To achieve this a balanced sample of 21 males and 21 females was chosen from our large sample. The speakers in this balanced sample are comparable in that there is a close match among them (e.g. a husband who is 68, college graduate, director of a government department, against his wife 52, college graduate, director of an orphanage).

The results of the analysis of this sample confirm our earlier findings: women are shown to disfavor the application of (Q) standardization (.39) while men are shown to favor the application of the same rule with a probability of (.61). The same pattern of sex differentiation is repeated at all levels of style (see Table 8), education (see Table 9), dialectal backgrouns (see Table 10), and age (see Table 11).

TABLE 8

DISTRIBUTION OF (Q) STANDARDIZATION BY STYLE
FOR 21 MEN AND 21 WOMEN

Sex	Formal	Informal	Casual
F	41%	29%	18%
M	65%	50%	32%

TABLE 9

DISTRIBUTION OF (Q) STANDARDIZATION BY EDUCATION
FOR 21 MEN AND 21 WOMEN

Sex	College	H. School	Uned.
F	36%	25%	19%
M	56%	48%	32%

TABLE 10

DISTRIBUTION OF (Q) STANDARDIZATION BY SEX AND DIALECTAL BACKGROUND

Sex	Urban	Fellaḥiin	Bedouin
F	25%	33%	25%
M	45%	56%	44%

TABLE 11

DISTRIBUTION OF (Q) STANDARDIZATION BY AGE FOR 21 MEN AND 21 WOMEN

Sex	Young 18-29	Middle 30-44	Old 45+
F	32%	35%	17%
M	48%	53%	45%

At this intersection three major questions must be raised: First, are these standard forms considered the most prestigious in the Arab speech communities? Secondly, are there any other prestigious forms of any source which may be used by women to symbolize an "overt" or "covert" prestige? Finally, as Smith (1979:113) puts it, are the speech variables seen as prestigious when used by one sex similarly valued by the other sex, and do women and men apply the same eveluative criteria in judging what is prestigious?

The first question can be answered positively. The standard variety in the Arab world is religiously motivated and it represents a national aspiration, a unifying drive, and a carrier of tradition, culture and history. Everywhere you go in the Arab world, standard Arabic is the official language as well as the language of instruction of the educational institutions. It is often considered the only right form and therefore it acts as a "corrective model" monitoring and directing the linguistic movement in the Arab world. In conclusion, the set of values attached to the standard variety makes it the most prestigious one.

To answer the second question empirically, I decided to examine the data to see if there were any other special forms preferred by women. The results of the analysis are demonstrated in Tables 12, 13 and 14.

TABLE 12

DISTRIBUTION OF (Q) VARIANTS IN THE URBAN GROUP

	F	M
q	23%	45%
ʔ	77%	46%
g	-	9%
N=	1595	2848

TABLE 13

DISTRIBUTION OF (Q) VARIANTS FOR THE BEDOUIN GROUP

	F	M
q	24%	35%
ʔ	46%	4%
g	30%	61%
N=	672	1358

It is clear from these tables that the alternative variant used often by women is the urban variant (ʔ), (i.e. urbanization of speech). When some informants were asked to evaluate the (Q) variants, it was reported that the urban (ʔ) can be considered more feminine and more urban and modern. The Bedouin (g) was evaluated as more masculine, while the Fellaḥi (k) as most stigmatized as it is the topic of mockery, comment, and social awareness.

The process of urbanization in speech, i.e. the adoption of urban linguistic features, is observed mainly among educated women or women who participate in public life and whose social networks (L. Milroy 1980) are wider. Therefore, this (ʔ) is competing with the standard (q) among women.

As for the uneducated women, they seem to be more conservative linguistically. But this conservatism is different from that in Western communities. It is towards the vernacular forms but not towards the standard form, i.e. the retention of the vernacular forms (cf. Fellaḥi women and their retention of /k/). These women often have fewer contacts with the outside world and their social networks are limited to the neighborhood.

On the other hand, men appear to favor the adoption of the standard variant (g), i.e. standardization. The exchange of local variables is very limited and it can only be seen when some urban or Fellaḥi speakers use the Bedouin (g). It is interesting to notice that the urban variant (ʔ) is rarely used by men of the two other groups. The Fellaḥin variant (k) is never adopted by either the urban or the Bedouin speakers.

In relation to the third question raised above, it is often noted that speech can, by its real or imagined association with sex, acquire masculine or feminine connotations. Our analysis demonstrates that generally speaking, native speakers of both sexes associate the standard form (q) with formality, outside world and connections, and with men more than women. The urban (ʔ) is associated with urbanization, modernization and it is, therefore, the preferred feature for women of nonurban groups.

In an informal and random sample, 40 educated (college students) speakers of both sexes representing all dialectal groups were asked this question: How would you rate the 4 variants (i.e. q, ʔ, g, k) in terms of prestige, sex, formality and personal preference? The answers were of great interest. More than 80% of them reported that they prefer to use their own local variant as they are used to it and they can be better understood in their communities if they use it. However, these informants did not rate their local variant as the best, most prestigious and the one they wish to use. More than 60% of them expressed a wish to use (q) all the time, especially men. More than 50% of these speakers believe that the urban variant (ʔ) is a feminine feature. Non-urban men said that they would never use this variant and that if they used it, they would be made fun of by their families and friends. Non-urban women, on the other hand, siad that they like to use (ʔ) and that they don't care if their sisters or daughters use it, but they would punish their brothers and/or sons if they use it. The majority of the speakers feel that (ʔ) is soft, gentle,therefore feminine.

3. Comments and Conclusions

Throughout the previous analysis, the following patterns of sex differentiation in spoken Arabic in Amman have been established:

a) Men use the standard linguistic forms more often than women.

b) Women, on the other hand, produce the urban linguistic variants more often than men.

c) The tendency of some urban and Fellaḥiin men is to use the Bedouin variant (g) in alternation with the standard (q) and their local variants.

Pattern (a) above seems to contradict the patterns reported in Western communities. Why do women in Amman in particular and in the Eastern communities in general (cf. Schmidt 1974, Salam 1980 for similar results) do this?

The linguistic behavior is very often the reflection of the social and cultural structures of the speech community or the social network of the speaker. The social and cultural expectations in the Arab communities require women in general not to take an active role in communicating with the outside world. They are not expected to talk, argue, or discuss things with men, especially strangers. Men usually handle all these public situations. Practically, men are the representatives and spokesmen of the house as well as the breadwinners. Women are expected to keep their voices down in the presence of men and not to interrupt men while talking, even in family gatherings. I have here to stress that these are empirical findings rather than personal judgements. The dominant rule, though changing slowly, is that women do not attend men's gatherings. If male guests come to visit, the man of the house receives, entertains and welcomes them. In sum, there are two distinctive sub-domains in Eastern communities:

a) the domain of women characterized often by informality, and

b) the domain of men where formality could prevail in certain situations.

The two worlds are kept distinct with limited contacts between them.

In comparison, women in Western communities take a more active role in the outside world and in communication with the outside world and have more social mobility. While men's jobs and income define the social level or status of the house, women express this social status symbolically, i.e. by decorating the house, dressing and speaking carefully. This, of course, requires the adoption of the more prestigious standard forms of speech and the latest fashions.

Gillian Sankoff (personal communication) told me that in some Western communities such as the British rural communities, while men keep busy on the farm, women take utmost care in decorating their houses in such a way as to make them look like middle class houses. Those women reflect the social refined image of the household.

One interpretation of this behavior is that women in Western communities "specialize" in the expressive domain, while remaining largely out of competition with men in the instrumental domain. Achievement in mastering prestigious cultural norms is not a threat to men in that it is defined as women's proper domain. Practically speaking, women are the spokesmen and social representatives of the house.

This leads us to the concept of sex and the division of labor and how it plays its role in sexual differentiation in speech. In Western communities, women's jobs are mainly in the line of public services, i.e. jobs like receptionists, secretaries, public relations officers or representatives, saleswomen, and so on. Such jobs require being articulate and careful in speech and refining one's language by using the standard prestigious forms. This relationship between occupation and the usage of the standard forms has been referred to by D. Sankoff and S. Laberge (1978) in talking about the 'Linguistic Market': "Teachers, actors, and receptionists tend to speak a more standard variety than other people of similar social or economic position (1978:239).

On the other hand, men take a more active role in the line of manual jobs or 'blue-collar' jobs which require physical effort rather than being careful in speech or dress. Women in their lines of work tend to refine their language while men feel that such a refinement is counter to their masculinity and manhood. This phenomenon is evident in the Black American communities whose women are mainly involved in secretarial service kinds of jobs, while men are more in manual jobs. Black women, therefore, have more upward social mobility and more access to the standard language which explains, at least in part, why they are always in the lead in using the standard forms (cf. Vaughn-Cooke, nd.). This social mobility which brings women to a more direct contact with the standard prestigious forms and requires improvement in one's language, dress and manners is characteristic of women in Western communities.

Many writers (e.g. Thorne and Henley 1975:17-18, citing numerous other sources) agree that, especially on the lexical level, talking 'badly', i.e. using coarse, bad, dirty words is acceptable for men but not for women. Men are in direct contact with the actual material things, and they are expected to develop special language norms (jargons) which are always removed from the standard. On the other hand, women are in direct contact with the social and 'gentle' aspects of life where they are expected to symbolize the social status of their husbands.

In light of all these different cultural and social norms, one can understand why women in the Middle-Eastern communities in general, do not lead in linguistic changes, especially those towards the standard forms. A standard form is associated with formality, public life and the outside world, which are not the domains of women. Instead, women look for local social prestige which can be attained by using the urban variants. These are associated with modernization and progress, a dominant local belief, and are socially evaluated as soft, gentle, light, and feminine.

Speaker 53, female, college graduate, as well as many other speakers, told me that she and her sisters use (?) because it is more suitable for women, and she added that this (?) is not good for men, and therefore her father and brothers use (g) instead. This phenomenon is very common in this community. This explains why non-urban women tend to use the urban variants and that the urban women retain their local variants. This gives us half the answer.

The second half has to deal with the fact that women are conservative in Eastern communities, i.e. they retain their local vernacular linguistic features which are in some cases stigmatized. Non-urban uneducated women seem to retain their local variants such as (k) and (g) for (Q) and /c / for (K), at all stylistic levels. Those uneducated women are often confined to their local communities or neighborhoods in which the vernacular is often not stigmatized. These women do not participate in public life and so they do not need to modify their speech in any direction. In fact, they often exhibit less variation than other liberal, educated women. However, if these uneducated women have active roles in society, i.e. have more complicated social networks, they will often adopt the urban variants. By way of illustration, see Table 15, below, which shows the distribution of (Q) variants among the Fellaḥi women by education which contributes to the degree of openess or closeness of their social networks.

TABLE 15

DISTRIBUTION OF (Q) VARIANTS AMONG FELLAHI WOMEN BY EDUCATION

Ed.	q%	K%	ʔ%	g%	N
College	41%	1%	58%	-	359
H. School	43%	24%	33%	-	297
Uned.	16%	74%	9%	-	801

To sum up, in Amman:

a) the standard linguistic forms can be marked as:

$$\begin{bmatrix} + & \text{formal} \\ + & \text{national prestige} \\ + & \text{masculine} \end{bmatrix}$$

b) the urban variants can be characterized as:

$$\begin{bmatrix} - & \text{formal} \\ + & \text{local prestige} \\ + & \text{feminine} \end{bmatrix}$$

It is clear then that sexual differentiation in speech often plays an important role in the mechnaism of linguistic change and variation, though the patterns of differentiation differ from community to community. One can predict, based on this sex differentiation that in the future, and as a result of the spread of education and employment among women of all origins in Amman and in the Middle East in general, the urban linguistic variants such as (ʔ) will replace the other vernacular forms among women. This (ʔ) will be used variably with (q). As expected, this process of urbanization may be interrupted by the constant contact with the roots in the village, camp, or tribe where the local variants are stronger.

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